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THE HIGH SCHOOL

A STUDY OF ORIGINS AND TENDENCIES

BY
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WITH AN INTRODUCTION BY
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INTRODUCTION

The high school is coming into its own. Secondary education has begun lately to assume a prominence and to have a recognized importance such as would be suggested by the priority of its development.

As the painstaking historical survey in the following chapters makes clear, formal secondary education was developed ages before any need for organized elementary education arose. The latter came later as a necessity following the development of written language. Such a historical study of secondary education is of value because it is a study of a great development, an examination of secondary education as an important and interesting sociological phenomenon. It is, besides, a practical investigation of the varied applications of means to ends that have been developed in each of the epochs of secondary education. It presents a study of a pivotal institution and of its relations to different times and conditions.

The aim toward which the present movement in education is tending is universal complete education within the limits of the public school period. This of course means that the number of high schools must be increased many times, and these high schools, in order to meet present and future social conditions, must evolve out of historic education.

The present book may well serve as an aid in studying this great movement and in guiding it with historic judgment. To study a problem we must know its roots. The study thus becomes of immediate practical value to every teacher and parent of adolescents. Through its suggestiveness we may be guided in recognizing the right aims of high school training, in harmonizing practice with sound theory, and in adapting curriculum making, method, and teacher-

training to the actual purposes of the school that the community establishes and maintains for its youth.

It seems a work of supererogation to insist upon this clearness of view and this honesty and intelligence of effort, but any examination of the high schools of the country in their actual work will reveal in many places a woeful lack of clear vision and of honest, intelligent effort.

There are two great changes that have come about in the social life of the United States within the last fifty years — one in our population, the other in our education. At first these two changes may seem to be wholly unrelated, and when one attempts to account for them historically he finds himself wandering far a-field and traveling apparently now in one direction, then in another.

These are the two changes: — In 1867 the United States Commissioner of Education made the statement, in answer to an inquiry, that there were then about forty public high schools in this country. In 1915 there were eleven thousand five hundred public high schools. This is an increase of nearly thirty thousand per cent. The increase in population in that time was about one hundred and fifty per cent. In 1867, there was one public high school to every nine hundred and fifty thousand of the population, in 1915 one public high school to every eight thousand five hundred.

This means that within less than fifty years the public high school idea has become firmly established in this country. At the earlier date only a small proportion of the population believed that it was the duty of the State to furnish free secondary education to the boys and girls of the country. In the minds of most men at that time, public school education included only what we now call elementary education. An overwhelming majority of the voters of this country in 1867 therefore believed that the State had performed its full duty toward the rising generation when it furnished free schooling from the age of six to the age of fourteen. Eight years was the highest limit of the average American's conception of a public education.

At the present time, with an investment of not less than two hundred million dollars in public high school buildings,

with the constant employment of fifty-eight thousand high school teachers at regular salaries, and with a total annual outlay, on high school education, of over sixty million dollars raised by general taxation, we may fairly conclude that the average voter believes that it is the duty of the State to furnish to its boys and girls a public school education that includes four years in the high school,— that the public school should open its doors to the youth of the country from the age of six to the age of eighteen or twenty. Within fifty years therefore the conception held by the people of the United States as to what constitutes a public school education has increased till the standard length of a boy's or girl's schooling at the State's expense has risen to twelve years instead of eight,— a fifty per cent. expansion of public opinion on this vital matter. This is one change that has come, and it is a most significant and far-reaching one.

The other great change concerns the character of our population and is equally vital, far-reaching, and significant, though it does not primarily suggest congratulation, encouragement, and a feeling of optimism.

All of us Americans — excepting a few Indians — are immigrants or descendants of comparatively recent immigrants. No American family can trace an American abiding place farther back than a dozen generations or so. All of us have ancestors, within a few generations back, who were born " in the old country."

And the particular old country from which those ancestors came we can usually name for ourselves, even though, as is frequently the case, we cannot give the Christian name of the original immigrant. In the average American audience of fifty years ago,— and in many rural districts this is still the case,— a speaker could look his audience over and, though all were personally strangers to him, he could name the list of countries and stocks from which their ancestors came, and this would be the list: England, Ireland, Scotland, Wales, Germany, Holland, Belgium, France, Switzerland, Denmark, Norway and Sweden. Those twelve countries included the old homes of nine-tenths of the families of America in 1867. Countries and peoples differed

in detail, and each contributed its element of value to the "melting pot" in which the American stock was being fused. But in all these elements of population there was vastly more of similarity than of difference in the essential things. There was in all of them the possibility of Americanism; there was good, sound, healthy race stock on which could be grafted the ideas and the ideals that together make "America." There was, moreover, in all of them a development due to hundreds of years of race training through the great struggle in those lands toward freedom and the ideals which go to make up Americanism, and consequently the material for self-government was ready for the great experiment in the new land. The remarkable studies by Professor Edward A. Ross of the University of Wisconsin, published in the *Century Magazine* under the title, "The Effect of Immigration upon Race" (and since printed in book form), deal with this matter as the limits set by this chapter will not allow, and far more brilliantly and convincingly than can be done by the present writer.

Immigration has increased amazingly since that period and has gone on with little interruption until temporarily stopped by the present war. A million immigrants a year have been pouring into the country to become American citizens,— an addition of from one to two per cent. of foreigners to the total population every year, and a much larger percentage when calculated upon the basis of adult male population.

While all the countries named above are represented every year in the tide of immigration, their actual contributions, in most instances, and their proportion of the total in nearly every instance, have decreased. As we all know, this is largely owing to the fact that streams of immigrants have been coming in larger and progressively increasing numbers from countries and stocks very slightly represented in our earlier immigration. Italians, Austrians, Magyars, Bulgarians, Roumanians, Russians, Servians, Slovaks, Slovenians, Ruthenians, Croatians, Bohemians, Poles, Lithuanians, Finns, Greeks, Armenians, Syrians, Turks, even Arabs and Hindoos,— these are races represented increas-

ingly, and some of them in very large numbers, in the immigration of the last half century.

This change in immigration is bound to have a tremendous effect upon the character of the American race. The serious question arises what the effect will be upon American ideals, institutions, and customs.

This is a fair question and one that is not to be construed as a reflection upon any of these newer Americans or the lands from which they come. Just as there are manifest differences between the stocks that came from the twelve countries in the first list named above, so there are differences between the peoples of the second list; and an honest and impartial examination will convince the student that there are even more manifest and striking differences between the immigrants who come to our shores from these latter eighteen or twenty race stocks and those who came from the others. This certainty is true when one considers their preparation, historically and sociologically, for American citizenship and the likelihood that they will assist in preserving and developing the ideals whose working out has produced what we call "America." The writer believes that such a judgment will receive the support of any educated and fair-minded Italian or Russian or Pole or Greek or Magyar or representative of any other people who has studied American institutions. At the same time each new-comer may point out and emphasize, as he should, the strong points of character in the people of his own race and may declare his optimistic belief in a glorious and manifest destiny for the new American that shall come out of this "melting pot," and with this optimism and this faith and this prophecy we have no quarrel. No man knoweth; the future is on the knees of the gods. We are learning more and more to make ourselves the intelligent and loyal instruments in the hands of Providence to fulfill the best of prophecy. "Kismet" is comfortable as a solace in the face of trouble, but it belongs not to the Occidental mind. Rather do we, with reverence, say: "Our Father worketh hitherto, and we work."

In view of the immense mass of unprepared material that

is coming into the digestive system of America, in view of a thousand changes in immigration, in transportation, and in political, sociological and economic conditions, in view of the great unrest of the last decade, we may, without deserving the charge of "little Americanism," inquire whether the tremendous change in the character, the preparedness, and the moving impulse of this later immigration is not coming about so fast as to warn us of a real danger to free institutions. These institutions are still to undergo their greatest test, and to rouse us to do all that may be done to meet the situation and to solve the problem.

In those last three words is the real challenge. We may talk of restricting immigration, but it is not likely to be done, — at least not as long as we are governed by political parties — unless, indeed, the great war stirs our lawmakers more than seems likely. No political party would seriously advocate any such restriction and attempt to make good such a plank in its platform, for the reason, narrow but potent, that the leaders of that party would be sure to lose the next election. The difficulty lies in the great American complacency, the feeling that Uncle Sam can not only "whip all creation," but can, on short notice, receive all comers and transform them without delay into intelligent, loyal American citizens. The problem, therefore, is to do this very thing. And there is and must remain one chief factor in bringing about that longed for result, the making of the "oppressed of all the earth" into good American stock fit for self-government. It is the public school, which, in order to do its work with any hope of achievement, must have all the wealth that can be spared to it, all the wisdom of all the wise men, and all the devotion of all of us, more or less wise and all loyal.

And here appears the connection between these two great changes in American life that have been coming about simultaneously within the last half century,— simultaneously, but seemingly with no possible relation to one other,— on the one hand the development of the public high school idea, the increase of fifty per cent. in the conception of the average American citizen as to what he owes in the way of

public free education to the boys and girls of the country; on the other hand, the great change in the character of the prevalent immigration, with the possible and even probable change in the character of the race itself.

If it be noble in man to rethink the thoughts of God, it may be right to conceive Him as viewing the great, new chosen land of opportunity and experiment, a land abounding in resource and energy and sifted stock, and deciding in His wisdom to give to that land *two gifts*. One gift is in the form of a burden, responsibility, millions of peasants from untrained races, from unfamiliar nooks and corners of the earth, from lands, some of them, with little of achievement in the world's history, all to be made over into a united people fit for self-government. The other gift is a change in American hearts, a broadening of vision, an increase in the conception of what an education means. Let us say that the Almighty has given us the raw immigrant with one hand, and, with the other, the American public school system, of which the most vital part is the American High School, a creation unique in all educational history, and that now He demands of us the wise and loyal use of one gift for the development of the other.

With such a view, we cannot study with too great care, too great open-mindedness, or too great devotion the development and character of the American Public High School.

JOHN CALVIN HANNA,
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AUTHOR'S PREFACE

One of the most significant phenomena in secondary education of the present decade is the increase in literature on the High School. This is an indication that the most characteristic school in our system is beginning to receive the attention it merits as the determining factor in American education. All the current books however approach the matter principally from the hither side. Even the historical books, most of them devoted to noted individual schools, have described or discussed only the more modern phases of secondary education. These books however have rendered a distinct service on the historical side and make it unnecessary to take up the more recent epochs of the secondary school with the same fulness required by earlier epochs.

We need to approach the subject from both the near and the far side. The present book attempts to study the high school as an evolution. The author has placed himself inside the facts and conditions of each epoch and has tried to interpret its spirit. This aids us materially in interpreting the present. We are impressed in a new way with the principles of education, and, as we study the growth of means and ends and the modifications that have been made to meet religious, social, political, and industrial conditions as they have changed at different periods for more than thirty centuries, we gain new view-points for studying present problems and for adapting secondary education to new times.

The author hopes he has written a book that cannot be characterized as doctrinaire, that he has succeeded in getting into the life of the secondary school and thus in adding to various chapters qualities of concreteness and reality. In the superintendence of public schools, in teaching and super-

vision in high school and academy, in the training of high school teachers in normal school and university department of education, and in supervision of and participation in the training of high school graduates for teaching in elementary schools, he has had opportunity to observe the work of the high school from various angles. His study has brought him into close sympathy with the education of the adolescent and has given him larger faith in its possibilities and a broad interest enhanced by the fact that his own boys are just entering or approaching the high school period.

The author has also had special opportunities to make long and careful investigation of historic secondary education from many and varied sources, ancient and modern, primary and secondary.

In gathering material he is under obligations for generous responses by educators in all parts of the country who have furnished him with their latest high school programs of studies. He is under special obligations to Mr. John Calvin Hanna, Supervisor of High Schools of the State of Illinois, who has written the illuminating introduction, to Professor William Estabrook Chancellor, of the College of Wooster, who has read the manuscript and made valuable suggestions, and to Dr. Charles Hughes Johnston, of the University of Illinois, who has supplied an advance copy of the new terminology. For all who have thus assisted and encouraged him the author here records his warm appreciation and thanks.

Prospect, Paterson, N. J.,
October 23, 1916.

THE HIGH SCHOOL

As adolescence is the central and determining period in human development, so the High School is the central and determining school in our system of education. It is the key to the future development of the nation.

THE HIGH SCHOOL

I

SECONDARY EDUCATION IN PRIMITIVE TIMES

The point of view.— If we are to have a comprehensive view of the evolution of educational forms, we must take as our starting point the ideas of tribes that flourished beyond the confines of recorded history. It is therefore the object of this first chapter to discover and examine the acquisitions of these primitive times and discover the means of transmitting and perpetuating them, i. e., the provisions for education.

It is difficult to gain even a faint conception of prehistoric life and thought. If we can forget our modern modes of thought and shut our eyes to our surroundings, we may hope in some degree to realize the position of primitive peoples. We must get rid of our complexities, of our tendency to pass over steps in processes,— to eliminate in thought parts of a series and bring remote and near together. We must as far as possible place ourselves at the point of view of these ancient tribes, bearing in mind that life, thought, and expression were very simple and moved by short stages; for industrial life, social organization, religious conceptions and feelings, and mental and physical life generally were just beginning, as far as their evolution in the human family is concerned. We must think even more simply and directly than do the plainest of modern men.

Means of studying primitive times.— There is no highway for reaching prehistoric times, but there are several pathways. Again there is no body of definite information ready made, on which we may lay our hands after indefinite journeyings. Yet the people of these primitive times have left embedded in the strata of civilization, and sometimes in the soil they occupied, various evidences that, through inference and analogy, may be

used to make out a fragmentary story of their lives. Often some piece of their handiwork comes to view to give something more tangible as to their thought and action. In addition to this, habits of thought, customs, ideals, and forms and formulæ in which their wisdom was condensed to make its transmission more secure, were handed on indefinitely. Some of them appear in faded outline, and sometimes in bold relief, in early historic peoples and serve, now as focusing points for investigation, and again as guides along the paths to prehistoric times. Slowly, with unstinted effort, students have forced their way back and have been able to picture in general outline the movements and life of the earliest peoples, to tell their story, and to make plain their ideas and modes of doing things.[1]

Organization of primitive society.— The organization of primitive society was based on the family. The family grown large — the ancient clan and tribe — simply continued the characteristic family organization, modifying it enough to adapt it to a larger and more complex unit. Each family, clan, or tribe was an end in itself, an exclusive unit, looking on all outside as strangers, and virtually as enemies. The "barbarian" of the Greeks and the "gentile" of the Hebrews are relics of this old organization and its attendant thought. The struggle of patricians and plebeians at Rome grew out of the same tribal solidarity.

The bonds of union of this primitive society were blood and religion.[2] But these two bonds were really one, as they were different sides of the same central force. The primitive family unit and the series of subordinate units bound to it, as sons gained families of their own,[3] were indissolubly bound together and were subject to the many-sided power of the father of the central family. The father was legislator, magistrate, priest,— the all-pervasive governing force of all.[4] They looked up to him when alive; they worshipped him when dead. He controlled their lives in life. In death he still pre-

[1] See Appendix I for a more specific description of sources.

[2] De Coulanges, Ancient City, 15, 16, 49–52, 174. See generally Book I and Book III: 1.

[3] Do., 149, 153; Von Ihering, Evolution of the Aryan, 32 ff. See Appendix II, 11.

[4] De Coulanges, *op. cit.*, 112 ff., 116, 149, 153, 301, 302.

sided over them; and it was one of their supreme objects to secure his favor.[5] The hearth worship, with its lares and penates, that figured so prominently in historical times, had its chief significance in this ancestor worship. The family in this broader sense also included various persons who were dependents in one degree or another. The family thus constituted what is called the clan. It had its own worship, its altar, its tomb, and its general organization, distinct from those of every other clan.[6] Altar and tomb were its centers. The clan was a compact and forceful group. The group prescribed and dominated; the individual was entirely subordinate; his life was the life of the group.[7]

Religious significance of acts.— From the very organization of early society it naturally resulted that every act and event had its religious significance, representing either the favor or the displeasure of the gods.[8]

Law an outgrowth of religion.— Even the ordinary relations of life, finally included in political and civil law, had their ground and origin in the universal blood relationships, which, we have seen, were really religious ones. The law was, in an important sense, an outgrowth of religion.[9]

[5] De Coulanges, Ancient City, 15, 16, 23, 24 ff., 44, 49.

[6] Do., *op. cit.*, 149–153.

[7] Do., 49–52, 293–98, 301–302; Appendix II: 8, 11.

[8] Thus a multitude of forms and rites and their accompanying formulæ arose to meet the varied acts of life, and to secure divine favor or ward off divine displeasure. Do., *op. cit.*, 21 ff., 23 ff., 49, 217 ff., 223 ff.; Appendix II: 8.

In the evolution of the state, religion became differentiated into different departments, just as the father's power separated into various functions of government, each presided over by a separate functionary. Religion still dominated the whole life, however, as either a serious or an oppressive influence binding closely to forms and ceremonies, or as a joyful bond of life.

In time religious influence became less dominant after the manner of primitive modes and types, and even became, at certain times and places, divorced from life to a greater or less extent. But the ideal still was that it should infuse life, giving it meaning and supplying and moulding ideals, though this infusion was entirely different in spirit, form, and attitudes from the earlier type.

To family religion in course of time was added a more external religion — worship of the powers of nature. The Roman came also to worship various deities representing abstract ideas that had special influence with men — Virtus, Fides, etc.

[9] Do., *op. cit.*, 248 ff.

What then were the acquisitions that primitive peoples, under this simple and impressive organization, accumulated and must hand on?

Acquisitions to be transmitted. 1. Social and political.— From their organization itself social and political facts, and correlatively social and political forms, suggested and impressed themselves. Thence came tribal rules and customs. Eventually laws developed. These things, with the more intimate tribal possessions,— its traditions, its rites, its relations and interrelations, its social feelings and bonds,— formed an important body of knowledge and sentiments to be transmitted.[10]

2. **Tribal history.**— Tribal and national history was forming[11] and was constantly outgrowing itself or modifying itself through race amalgamations and confederacies, and so was constantly becoming more intricate.

3. **Nature facts.**— Again primitive man was face to face with nature, which suggested operations necessary for his livelihood and guided him in them. As he cooperated with nature to supply the needs of existence, various industrial facts and processes drew his attention and were impressed on his mind.[12] As peoples and experience grew, the field of knowledge grew correspondingly. Discoveries multiplied, and crude inventions suggested themselves. To simple nature-knowledge was in time added more complex and scientific knowledge. These acquisitions were not understood, but were grasped in a merely external and practical way. They were however vital and were prized accordingly.

4. **Religious facts.**— These classes of facts and relations

[10] Hewitt, Ruling Races of Prehistoric Times, II: vii–xv, and preface generally, 1, 2, 87, 88, *et passim.* De Coulanges, *op. cit.*, 149–153, 154–158, 167–176, 248 ff., 301–2; Vedic Hymns, Mandalas I, 114; VII, 56; X, 78; Zend Avesta, Fargard 4; Seebohm, Tribal System of Wales, 64, 71, 87. The last author's English Village Community will also be interesting as indicating the strength of early customs and their relation to tribal integrity. Though referring to a much later time than the one we are considering they illustrate in a general way the points here made.

[11] Hewitt, *op. cit.*, I: xiv, 78–83; II: vii–xv, 306; Appendix II: 4.

[12] Hewitt, *op. cit.*, I: xi, 7, 64; II: vii–xv, 1, 2; Vedic Hymns, Man. I: 43, 165, 168; V: 54, 58, 61, etc.; Zend Avesta, Fargards III, VII; Appendix II: 3, 7.

had to do with the visible. But primitive man was also face to face with forces that he could not see, but could merely feel,— with mystery, with spirit life, which we characterize as fetishistic. The relations and feelings thus impressed, added to those developed by family organization, were his religion. He must meet them in appropriate ways,— by acts and rites, by formula and sacrifice, by sacred dance, by symbol and altar.[13] Primitive awe, which was perhaps the starting point on this side of life, early grew into these simple and natural forms. The dance is a constant element in primitive religion. Here was rhythm of body. On the other hand appears the rhythm of language in the hymn,[14] which was also an early development. Rhythm impressed and attracted. In fact it would be fair to say that rhythm in one form and another is one of the most fundamental modes of expression and meets with universal response.

5. **The physical.**— The physical life[15] also expressed itself in simple and natural modes, such impulsive and instinctive modes as children adopt. Here again the dance played a part, and games are as old as man.

6. **Art.**— Finally a crude art was growing, taking the forms of symbols and rude representations. The starting point here was found in religious forms, as indicated by what has just been said. Primitive man was fond of the symbolic, and it appears again and again in line, circle, spiral, and rude figure.[16] Art grew apace. It was not long, measured by developmental epochs, before art came to serve practical and esthetic ideas by highly artistic forms.[17]

7. **Tribal institutions.**— In connection with these acquisitions there grew up certain organizations and institutions which focussed and enforced the characteristic knowledge of the community. Here came in religious ceremonies and festivals, all the social forms in which the social units expressed

[13] Hewitt, *op. cit.*, I: x, xiv, xv, 78, 83; II: 1, 2, 87, 88; Appendix, 8, 10; Vedic Hymns, Man. I: 165, etc.; VII: 46; VIII: 7; Zend Avesta, Fargards III, VII, XIV.

[14] De Coulanges, *op. cit.*, 49; Vedic Hymns, *passim*.

[15] Do., Man., V: 54. 14; V: 58; VIII: 20.

[16] Do., Man., I: 134; V: 53, 54, 60; VI: 66.

[17] Ripley, Races of Europe, 486 ff.

themselves, and all official programs connected with social and political organization.[18]

Primitive education.— Thus primitive man slowly accumulated a body of knowledge, beliefs, and forms. They were tested and approved by practical use, or enforced by instinct and the impressiveness and mystery of his surroundings, according as the point of view was that of landholding, livelihood and community existence, or that of the impingement of the spirit world. His experiences, as he faced the conditions of survival and progress, were intense, impressed by various labors and discomforts and by the joys of conquest that were involved in pioneering the way to guiding-facts of life. What he had gained was naturally held with great tenacity and perpetuated with great care. Its transmission was education.

Transmission-forms. The myth.— The form which some of the most valued parts of this knowledge took was determined by primitive man's attitude toward the physical world. Nature appeared to him to be full of life, full of marvels. It thus inspired awe and superstition and confronted him with spirit everywhere. As he had constant dealings with these unseen and impressive forces, he must express himself about them, and he naturally spoke of them in terms of life. He readily personified nature. Very early began a kind of folk-lore, which with us goes under the name of myth or legend but was serious fact to the inventors. Primitive ideas were naturally concrete and picturesque, for they followed primitive impulses. The myth was the natural form of expression, as natural for them as the exactness of narrative is for us, and it embodied truth for them as fully as our soberer narrations do for us. There was no self-deception, and no attempt to deceive others,— at least on the part of the masses who perpetuated the myth.

Growth of myth.— We may trace the growth of myth, which in an important sense, as we have seen, was ancient his-

[18] As to the matter of primitive acquisitions generally see Hall, Oldest Civ. of Greece; Ridgeway, Early Age of Greece; Greenidge, Roman Pub. Life, (Chap. 1, sections 1, 3, 4, 5); Seebohm, The tribal Sys. of Wales, 64, 71, 87; Barton, Semitic Origins, 80 ff., 95, 98, 314–15, 317, *et al.* See also various references in Vedic Hymns and Zend Avesta. The various references will show something of the scope of acquisitions and various details. We are here chiefly concerned only with the general.

tory, from the simple nature tale, through tribal and national tales, to the individual hero-tales of the Aryans,[19] with their infinite crossings and transfusions. In the development of this form of thought and expression special conservators of national myths arose, forming groups or classes, who, as our references show, were both directly and indirectly teachers.[20] Again special laws and forms of composition were developed to insure regularity and exactness.[21]

Hero-tales—Ballads.— Some of the most interesting examples of this class of folk-lore are the rhythmic tales that describe the deeds of heroes and heroic tribes and nations.[22] They were songs and ballads, which were natural means of oral transmission, appealing to fundamental instincts. We may trace the growth of ballad literature from simple form to growing epic. In connection with the ballad we find the rhapsodist who developed this powerful instrument of information and education to a high degree of efficiency and spread ballad-lore assiduously. There were schools of rhapsodists to foster and develop this form of transmission.

Proverbs, etc.— Along with the myth-growth various bits of practical wisdom were taking the form of adage and proverb that not only secured conciseness and the verbal exactness characteristic of the oral transmission of specially important facts in primitive times, but attracted attention and aided memory.

Thus in connection with the various interests and relations of clan life and the life which grew out of it there grew up a large body of folk-lore,— hero-tales, tales of national exploits and movements, songs and hymns, proverbs and maxims, formulæ (religious and legal, or better religio-legal), and religious calendars, all of which were to become the possession of the true clansman or tribesman.[23]

[19] Hewitt, *op. cit.*, I: xi, xiv, 7, 76–83, 86, 519, 521 ff., 539 ff., 556 ff.; II: vii–xv, 89 ff., 306; Appendix II: 3, 4, 7.

[20] Story tellers, etc., in different nations.

[21] Hewitt, *op. cit.*, I: xi, xiv, xv, 81; II: vii–xv, 306; Appendix II: 3, 4, 7.

[22] Hero tales were a later development than tales of national exploits.

[23] De Coulanges, *op. cit.*, 23, 24, 29–31, 49, 52, 210, 223, 226, 248; Vedic Hymns, Man. VII: 56; V: 59, *et al.*; Müller's Preface to first ed.

Relics of this folklore, particularly the ballad and the epic. — Many fragments of this folk-lore have come down to us, sometimes with various accretions gathered through the ages, sometimes embedded in larger and more modern creations, sometimes transformed, but sometimes again with little or no change or obscuration. Vedic hymns, the Zend Avesta, the XII Tables, and the Laws of Manu give us valuable information as to the thought and ideals of remote ages. Particularly interesting here are the great national epics that have grown out of the wealth of ballad literature of still earlier ages, when the ballad was the natural mode of literary expression. Thus we have the Ramayana and Mahabharata of India, the Iliad and Odyssey of Greece, and later epics giving corresponding revelations of later peoples,— the Shah Nameh of Persia, the Kalevala of the Finns, the Niebelungenlied and Beowulf of the Teutons, and the French Song of Roland. These epics not only give us insight into the life of the time, but they suggest one of the most powerful educational forces.

Forms of education.— We now see something of the environment of the prehistoric boy. His training, whether natural or artificial, consisted in giving him power over this environment through possession of the knowledge-acquisitions of his race and through practice. What particularly interests us here, however, is the special form that this training took. Here we are met by three typical questions: — What was the end in view? How may we formulate the curriculum for the sake of comparison with those of other epochs? What was the method of training? The brief sketch which is here given, the marginal references, and the illustrations in the appendix will give some answer to these questions. It is true that the use of these modern terms, end, curriculum, method, may seem anachronous, but rudiments of the ideas which they represent are found in primitive times. More than this, it would seem that these early peoples had quite as clear an idea of these things as we have.

Ideal and aim.— The ideal in primitive education, as in all

of Vedic Hymns CXI; Zend Avesta, Fargards I, II, etc.; Hewitt, *op. cit.*, I: x, xiv, xv, 7, 63, 76, 78 ff., 111, 540, 541, etc.; II: vii–xv, 1, 2, 89 ff; Appendix II: 3, 4, 8, 10, etc.

education, was a reflex of life, but without the vital force which projected life into a fuller future. The social unit was a powerful one, and impressed itself and its ideas on the individual who had little power of initiative, little power to reject, to add, to carry forward.[24] The tribe was everything, the individual nothing, absorbed by the overshadowing organization that alone had significance. "The dewdrop slips into the shining sea," or rather into the sea, for destiny was not idealized. Under these circumstances the possessions of the race were given over, immutable, to the individual. He must accept them exactly. Every syllable, every detail, was essential. Nothing that the race had wrought must slip. The ideal was then emphatically in the present. Power to idealize and generalize had not yet come. Knowledge was empirical. Men dealt with unrelated details rather than an organized body of facts. The aim was to conserve the tribe and all it stood for. The race must progress *en masse,* so to speak, with painfully slow progress. The lines were evidently clearly drawn, the limits clearly defined. Primitive man was thus the most conservative of beings. Opportunities to modify and advance ideals were few and perhaps depended chiefly on cataclysmic experiences of conquest and amalgamation. Progress under these conditions would be an accident, a chance discovery, not an organized force based on active individual effort. Society was static, not dynamic. Such was the ideal, and the educational aim accorded with it.

Curriculum.— When we come to analyze education and determine what we may well call the curriculum, we may make some such outline as the following:

1. Industrial facts: — Simple and primitive occupations. Practical facts gained through experience and treasured by older men (embodied in proverbs, etc.).

2. Social and political facts: — Facts and inheritances (customs, beliefs, etc.) as to organization of family, tribe, etc. Simple civic arrangements and regulations of community life.

3. Religious facts: — General religious facts (animistic) — Family religion (ancestor-worship). All characterstic religious ceremonies and ritual. Religion an all pervasive force, inspiring joy, sadness, awe, fear.

[24] De Coulanges, *op. cit.,* 293; Appendix II: 12.

4. Folk-lore: — Songs, ballads, tales or stories, from simple nature story, through race-story, to individual hero tales (myth or legend a modern name for these). Symbolical language sometimes used. The rhythmic element here should be noticed especially.

5. Art: — Rude representations of objects and symbols of worship. Devices on the same. Stone-circles, altars, etc., on sacred grounds carefully marked out for ceremonies.

6. Number: — Simple concrete facts (treated more fully in Chapter II).

7. Nature facts: — Much practical knowledge accumulated by the race and handed on with great accuracy and care.

8. Physical facts: — Dances; physical training incident to common life.

Method.— As to method, in an age when formal schools did not exist the means of gaining power over one's environment were the natural ones that lay open to all,— observation, imitation, play, participation (or practice). In this connection it should be noted that much of the folk-lore to which reference has been made was in rhythmic form that appeals to one of the most fundamental feelings, so fundamental that one may call it an instinct. Rhythm thus stimulates attention and aids memory. As a considerable part of the acquisitions of the community was thus included in the folk-lore, rhythmic inheritances naturally became most powerful educational material, and rhythm became a part of method. Again the tribal rites and festivals and the folk-lore recitals connected with them impressed ritual and history. Equally important as a means of instruction were the exhibitions given by the wandering bards who were characteristic of later prehistoric times and instructed while they delighted, and largely because they delighted, by rhythmic tales of national or individual prowess.

Rote learning.— But there was another element of early method that needs notice. A part of the knowledge of the community was regarded as more vital than the rest. It had cost much. It must be condensed into special forms and handed on without alteration.[25] There was a taboo against any change. This part of race inheritance sometimes called for special secrecy. It was deposited in symbolic characters, so that a spe-

[25] Hewitt, *op. cit.*, I: x, xi, 64, 74, 76–83, 134 ff.; II: ix, xi, 306. See the same author's Prim. Trad. Hist., I: 97, and Appendix II: 3, 4. Material for the training of adolescents was the object of great care.

cial language arose in dealing with it. Some of the most common forms it assumed were the proverb and myth, which were suited to the habits of thought of the people and, besides, were very convenient means of handing on valuable knowledge. In imparting this kind of knowledge the simplest and most natural method for an unreflecting people was rote-learning — mechanically committing to memory with no natural incentive to relieve it. It was admirably suited to forms that must remain inviolable. The descendants of rote schools and rote teachers are found to-day in the native schools of India and China.[26]

Oral and written language.— How early oral tradition was reinforced by written language as a means of transmission is not known. The date has gradually been pushed back, and now there is serious question whether a simple written language did not exist as early as the stone age.[27] However early it may have been developed, it is doubtful whether it was taught to young boys under fifteen or eighteen, because at first that which was committed to writing was probably the most sacred knowledge of the tribe.

Evolution of means of transmission.— As nations and acquisitions grew the process of transmission became more exacting and complex and more formal. We may roughly outline its growth from the most primitive form as follows: 1° A period when the child was left largely to himself and gained by the natural means first noted what the community had to offer. 2° A period when parents exercised more care and surveillance, showing and guiding and more consciously taking children into their life. An interesting phase of this is seen in the matriarchal Dravidian village community. Hewitt tells of the children taught by the elders (uncles) and matrons (aunts) of the tribe [28] the rules resulting from a long series of experi-

[26] Hewitt, *op. cit.*, I: 63.— See also Appendix II: 13. Aside from rote teaching that perhaps began with mere boys at this time, as it certainly did later, there was no formal school. Young children could gain all they were expected to learn by the most natural and informal means. Formal educational institutions for children arose very late.

[27] Ripley, *op. cit.*, 486.

[28] Hewitt, *op. cit.*, I: xi, 157; II: 1, 2; Appendix, 7. In each community, because of exogamous marriage customs, all men and women of the tribe were brothers and sisters.

ments or experiences forming their science of agriculture. To prevent error in transmission the rules were put in attractive form and "carefully repeated by each generation after the teachers till indelibly impressed."[29] 3° A period when the community made its elders more or less definitely into supervisors or conservators of community interests as related to the perpetuation of community ideals. Very early, "in Kushika times, we find developed the system of education of which the practical physical education of Persia and Sparta were relics.[30] Here was the origin of common meals. Here began the custom of regarding the child as belonging to the state, and of bringing the new born child to the elders to determine whether he was to be reared or not."[31] 4° A period of guilds, when society was more fully organized industrially, so that a boy could serve apprenticeship in a trade-guild.[32] This was class education that, under favorable conditions, developed into caste education, as under the Aryans in India. Guild-education began very early. 5° A period where society had grown complex enough to set aside special teachers, or groups of teachers, priests or laymen, to take charge of the education of children.[33]

Secondary training distinctive.— But now comes the question, was there any distinction as to age, or was the older boy's education simply a continuation of the training of the child in the various lines noted? Here we come upon some of the most interesting points connected with prehistoric education. All the inheritances and acquisitions to which reference has been made were not alike. Some were more sacred and secret than

[29] The first education seems to have been practical, and naturally so. Hewitt, *op. cit.*, I: 63; Appendix, 3; Hewitt, Primitive Traditional History, I: 65–66.

[30] Hewitt, *op. cit.*, I: 63; Appendix, II: 5.

[31] Hewitt, *op. cit.*, I: 297, 298, 410. Here again was the origin of the marriage customs and dual government of Sparta, showing the close connection of influential elements of Spartan population with eastern tribes.

[32] Do. I: 111; Appendix, II: 5, 6.

[33] Hewitt, *op. cit.*, I: xiv, 76. Speaking of primitive tribes he tells of village priest-teachers and women-prophetesses who became the national Asipu, the diviners, who not only were repositories of the past, but were also augurs and foretellers who interpreted the flight of birds and the movements of their entrails. They were the ancestors of the augurs of Rome and other priestly classes.

others. There was a kind of esoteric element in primitive knowledge accumulations. Some facts must be guarded more carefully, lest tribal well-being be broken. Some things must be absolutely safeguarded from enemies, i. e., all outside the clan or tribe circle, lest one tribe get some sinister advantage over another. These and other acquisitions must not be risked with children. They required an age which could be not only tenacious, but secretive. This is the adolescent age.

Evidence of distinctive training for the adolescent.— There is thus strong presumption that there was a distinction in education and that this distinction showed itself, not by differences in degree and amount simply, but by differences in kind, both in matter and method. There is not only presumption; there is evidence. 1° There are certain customs found in historic times, undoubtedly relics of earlier centuries or ages, that point to such a distinction as has been indicated. 2° There are some hints in the early literature of the Aryans. 3° There is still stronger evidence found in primitive tribes of to-day who are still untouched by modern civilization and well represent, in their customs, modes of thought, and attitudes, the childhood of races. The tribes thus present characteristics that may well have ruled in prehistoric days. Putting all the evidence together we are justified in saying that the training of the adolescent differed impressively from that of the child. First, there was a more conscious aim and it was better defined. Second, the community organized itself for a more definite training, prescribed certain forms, and, through characteristic ceremonies, gave a peculiar force to the adolescent's education that was lacking in that of the child.[34] Here came in "initiation" ceremonies, (naturally religious), and severe physical tests that often extended to body markings.[35] We may summarize this secondary training therefore briefly as follows:[36]

[34] De Coulanges, *op. cit.*, 46, 67, 68, 157, 169, 170; Zend Avesta, Fargard IX (Introd), Fargard XVIII, 1: 9; Appendix, II: 9, 14.

[35] These latter should probably be regarded as originally totemistic rather than as physical tests. This makes them at once more primitive and significant. They will be considered more fully in the next chapter.

[36] Fuller details are reserved for discussions that belong more properly in other chapters. (See II, III, IV.)

Summary of the training of adolescents.— The training of the adolescent naturally proceeded in part along the same lines as that of the child. He was getting more extended and fuller knowledge of the life of the tribe in its various directions. He was acquiring more power over his environment and the operations of life. But there was something beyond this. The choicest or most characteristic parts of the acquisitions of the race, the more secret or mysterious bits of knowledge, the more sacred traditions and legends, the more strenuous physical facts, were reserved for the adolescent and were applied to the young men by the elders of the tribe amid impressive ceremonies.

Secondary school as old as man.— There was, therefore, a kind of secondary education laid out in rather definite fashion. Ends were conscious and means well organized. The secondary school is therefore, in a sense, as old as man. The high school is the primitive school modernized. This will appear more fully as we proceed.

APPENDIX I

1. **The Aryans.**— Not many decades ago the most interesting and important part of the investigation of primitive civilization was to seek out in the highlands of Central Asia the cradle of the race that made Southern Europe, study civilization at this center, trace the two lines of diffusion to the East and West, and, again study the two branches of the western migration on European soil. Then the Aryans played a leading rôle in the development of early civilization. To-day their movements form a secondary episode in the early, though not in the earliest, ethnology of Europe.

2. **Notes on sources.**— The following notes on some of the sources as they appear to the author may be of some interest:

(a) Hewitt, in his Ruling Races of Prehistoric Times, gives us especially valuable and suggestive data for our purpose. He shows us the primitive Dravidians with their primitive organization, the matriarchal village community, and the Dravidians, or Dravidian amalgamations, moving westward and spreading their peculiar land customs and their civic and religious forms that made the foundation of the later Greek and Roman states, and other states as well. It is becoming evident that the basal element of European civilization of the South and West was not the Aryans, but other peoples pressing on from the East. To these peoples, it would seem, were due the element of law, the conditions that made for settled government and

industrial development, and the peculiar formalism found in the Roman religion. So interesting and full of detail is Hewitt's work that one is tempted to give more data than are essential for our purpose.

(b) Ripley, in his Races of Europe, has effectively sifted and organized the results of many investigators and has given us a detailed and careful anthropological description of the three fundamental races of Europe. His suggestions as to origins are fairly consistent with those of Hewitt. While his primary purpose is anthropological, he gives us some useful details as to modes of life and acquisitions, particularly in his later chapters.

(c) De Coulanges, in his Ancient City, has given us a most brilliant piece of work and specially valuable for getting at the points of view and organization of early society. His aim is rather psychological and sociological than strictly ethnological. His picture of the organization and culture of the prehistoric community is peculiarly vivid. While his study applies particularly to the fundamental features in the civilization of the classical states, which he probably conceived to be Aryan, it gives much of value in the study of any primitive civilization, and has been used as generally applicable in a broad sense.

(d) Other sources more or less valuable are noted on page 6. Still others are reserved for two special chapters which follow.

APPENDIX II

3. **Primitive knowledge and the method of transmitting it. Old folk-lore and its modern counterparts.**— "The first founders of national education were an agricultural race, and the lessons they had to teach their young pupils were not the rules of the art of war, or the mysteries of religion, but those which embodied the results attained by the long series of experiments which had formed a national science of agriculture. To enable these lessons to be transmitted from generation to generation in a form which secured them from distortion they were embodied in mythic tales which were carefully repeated by each generation of scholars after their teacher till they became indelibly impressed on their memory. Every one who has listened to Hindu scholars repeating their lessons after their master will understand how this was done, and it is to this systematic training of the memory that we owe innumerable works which have descended to us in Sanskrit, Pali and Prakrit literature."— Hewitt, I: 63.

4. "But when national education was looked upon, as it was amongst the Kushites, as one of the most important tasks of internal policy, and it was found necessary to improve and disseminate more widely than had hitherto been done the knowledge of the history of the country and of the results acquired by scientific research, these were all embodied in myths framed on the model of the seasonal myths which formed the folk-tales of the villagers, these being almost all based on the recurrence of the seasons, the most important subject of

knowledge to a people whose living was gained by the culture of plants, which could only be properly carried on when the land was prepared, the seed sown, the fields weeded, and the crops reaped and stored in the proper seasons. It is the story of the seasons which is told in the numerous stories of the three brothers, the youngest of whom, the reaper of the harvest, is alone successful in his quest; and it is they which appear in the Cinderella myth and its variants. . . . It is this mythical method of recording the movements of time which appears also in the story of the Briar Rose or Sleeping Beauty. It is tales like these which have always been from time immemorial the favorite modes of teaching among all the races who have successively ruled India." —Hewitt, I: 78–79.

"It is Sanskrit fairy tales which form the substratum of our European stories; and no one who has heard, as I have done, the fairy stories of my youth told by a wild Gond in the forests of Sehawa, at the sources of the Mahunuddy in Chuttisgurh, can ever doubt that these stories were originally conceived by the myth-makers of the most primitive tribes in the earliest dawn of civilization. The stories my Gond guide told me could never have reached his tribe from Northern infiltration in historic times, for I was probably the second, if not the first, European he or his people had ever seen; for, as far as I could make out, I was the second European who was ever known to have visited this wild and remote tract. . . . It was apparently these people who first formed the skeleton foundations on which later stories were founded, and, being a most practical people, they made them in such a way as to convey valuable instruction in an interesting and easily retained form. Having, like all nations with strong Malay affinities, such as the Chinese, Burmese, and Bengalis, vivid dramatic instincts, and being also, like the Bengalis, great makers of pithy proverbs, they easily and naturally turned these into stories which seemed to be tales told of individuals, and in dramatizing these, either in the story or in mimic action, they made the keynotes of the proverbs the names of the actors in the plot. When these stories were transferred from the village school and the village meetings in the Akra or dancing-place to the guardianship of the royal advisers and were made the groundwork of national history they were protected from alteration by the same taboo which forbade all tampering with the national ritual."—Hewitt, I: 80–81.

5. **Method of education with comparisons.**—"In order to insure the permanence of their national traditions the Kushikas insisted most strongly on the systematic instruction and education of the young, and they used as their model the Dravidian arrangements for the training of the village children of the matriarchal village. By this systematic method of education the lives of all the younger members of the community were passed in a course of discipline of which the Spartan education, descended from the tribal ancestors of the Dorians, is the best specimen. I have shown . . . how closely the

Dorian customs are allied to those of the Indian Nagas, and the remembrance of these national training-schools still survives in the schools of the Brahmans among the Hindus, in the Greek and Roman education, and in that of the ancient Persians or Parthians. They, like their brethren, the Parthian cavalry of India, were taught to ride, to shoot the bow, and to speak the truth."—Hewitt, I: 63. (See also pp. 297, 298.)

6. "It was they (the Aryans) who changed the system of trade-guilds and craft-schools, formed under the Kushite government for preserving and adding to the knowledge necessary for the continuance and advancement of the crafts of the country, into family circles in which every one remained through life a member of the caste in which he was born, instead of being, as people were in Kushite times, free to enter any other caste to which their inclinations led them, if they could, as in the ancient village, secure the consent of the members of the guild to their admittance. Thus this Aryan family system had its roots in the old customs of the country."—Hewitt, I: 111.

7. **Early folk-lore agricultural.**—"In every village the rising generation was trained by their mothers and maternal uncles, and it was from the teaching instincts thus developed that the folk-tale and the national proverbs which are as ubiquitous as the folk-tale, originated. An analysis of the earliest of these stories, which do not profess to be historical, will show that almost all of them are connected with the explanation of natural phenomena, and that they generally are the product of the brains of agricultural or hunting races who had keen mercantile instincts. . . . Some are too manifestly nature-myths, telling of the course of the year, a subject of vital importance to the farming tribes." (The tale of Demeter and Persephone and that of the Sleeping Beauty are given as Northern descendants of these myths.) —Hewitt I: xi.

8. **Family and clan. Their bonds of union.**—"We find in each house an altar, and around this altar the family assembled. The family meets every morning to address its first prayers to the sacred fire, and in the evening to invoke it for a last time. In the course of the day the members are once more assembled near the fire for the meal, of which they partake piously after prayer and libation. In all these religious acts, hymns which their fathers have handed down are sung in common by the family."

"Outside the house, near at hand, in a neighboring field, there is a tomb, the second home of this family. There several generations of ancestors repose together; death has not separated them. They remain grouped in this second existence and continue to form an indissoluble family."

"The members of the ancient family were united by something more powerful than birth, affection, or physical strength; this was the religion of the sacred fire and of dead ancestors. This caused the family to form a single body both in this life and in the next. The ancient

family was a religious rather than a natural association. Religion, it is true, did not create the family, but certainly it gave the family its rules."—De Coulanges, 49–52.

9. **Initiation.**—"A sort of initiation was also required for the son, as we have seen it was for the daughter. This took place a short time after birth, the ninth day at Rome, the tenth in Greece, the tenth or twelfth in India. On that day the father assembled the family, assembled witnesses, and offered a sacrifice to his fire. The child was presented to the domestic gods; a female carried him in her arms and ran, carrying him, several times around the sacred fire (to purify and to initiate into the domestic worship). From this moment the infant was admitted into this sort of sacred society or small church that was called the family. He possessed its religion, he practiced its rites, he was qualified to repeat its prayers; he honored its ancestors, and at a later period he would himself become an honored ancestor."—De Coulanges, 67, 68.

10. **Forms of religion and their rise.**—"When we sought the most ancient beliefs of these men, we found a religion which had their dead ancestors for its object and for its principal symbol the sacred fire. . . . But this race has also had in all its branches another religion, the one whose principal figures were Zeus, Here, Athene, Juno,—that of the Hellenic Olympus and the Roman Capitol."

"Of these two religions the first found its gods in the human soul, the second took them from physical nature. As the sentiment of living power and of conscience, which he felt in himself, inspired man with the first idea of the divine, so the view of this immensity which surrounded and overwhelmed him traced out for his religious sentiment another course."

"Man, in the earlier ages, was continually in the presence of nature. The habits of civilized life did not yet draw a line between him and it. . . . His life was in the hands of nature. . . . He experienced perpetually a mingled feeling of veneration, love, and terror for this power of nature. . . . On first looking on the external world man pictured it to himself as a sort of confused republic where rival forces made war upon each other. As he judged external objects from himself, and felt in himself a free person, he saw also in every part of creation, in the soil, in the tree, in the cloud, in the water of the river, in the sun, so many persons like himself. He endued them with thought, volition, and choice of acts. As he thought them powerful and was subject to their empire he avowed his dependence; he invoked them and adored them; he made gods of them."

"Thus in this race the religious idea presented itself under two different forms. On the one hand man attached the divine attribute to the invisible principle, to the intelligence, to what he perceived of the soul, to what of the sacred he felt in himself. On the other hand he applied his ideas of the divine to the external object which

he saw, which he loved or feared; to physical agents which were the masters of his happiness and of his life."

"These two orders of belief laid the foundation of two religions that lasted as long as Greek and Roman society. They did not make war upon each other; they even lived on very good terms, and shared the empire over man; but they never became confounded."— De Coulanges, 159–161.

11. **Solidarity of family.**—"Certainly we could imagine nothing more solidly constituted than this family of the ancient ages which combined within itself its gods, its worship, its priest, and its magistrate" (the father combined the functions of the last two functionaries). "There could be nothing stronger than this city which also had in itself its religion, its protecting gods, and its independent priesthood, which governed the soul as well as the body of man, and which, infinitely more powerful than the states of our day, united in itself the double authority that we now see shared between the state and the church. If any society was ever established to last, it was certainly that."— De Coulanges, 299.

A divergent view.— Von Ihering ("Evolution of the Aryan," page 32 ff.) rejects the thought of the compact continuance of the family and of filial affection as applied to the Aryan. He holds that the elder son soon deposed the father and that offerings to the dead were made through fear. At the same time he believes that the Romans were an exception and that among them the father retained his place. In fact the Romans illustrate in great detail the matters summarized above.— De Coulanges holds them as characteristic of the Aryans generally.

12. **Individual and community.**—"There was nothing independent in man; his body belonged to the state; . . . his fortune was at the disposal of the state; private life did not escape the omnipotence of the state."— De Coulanges, 293.

13. **Reference to teaching in Zend Avesta.**— Special references to teacher, learning, method. "If men of the same faith, either friends or brothers, come to an agreement together that one may obtain from another either goods, or a wife, or knowledge . . . let him who wants to have knowledge be taught the holy word. He shall learn on during the first part of the day and the last, during the first part of the night and the last, that his mind may be increased in knowledge and wax strong in holiness; so shall he sit up giving thanks and praying to the gods, that he may be increased in knowledge . . . and thus shall he continue until he can say all the words which former Æthrapaitis have said." Fargard IV, ii e. (The customary method of early times seems to be referred to. There is also indication of contract in teaching.)

14. **Ceremonies peculiar to adolescence.**— There are also some references, or rather some notes, as to a special ceremony for the

adolescent. "The nine nights" Barashnum "is the great purification, the most efficacious of all; its performance was prescribed, once at least at the time of the Nu Zudi (at the age of fifteen when the young Parsi becomes a member of the community), in order to wash away the natural uncleanness."—Fargard IX, introductory note.

The Kosti, "worn by every Parsi man or woman from their fifteenth year of age, . . . is the badge of the faithful, the girdle by which he is united both with Ormazd and with his fellow believers. . . . He who wears it becomes a participator in the merit of all the good deeds performed all over the Zarathusian world." Müller proceeds to describe the curious nature of the Kosti. Note to Fargard XVIII, I:9.

II

SECONDARY EDUCATION IN PRIMITIVE TRIBES TO-DAY

From this description of primitive education that is immeasurbaly remote from us in time, as well as in its evolutionary position, we come to a consideration of a primitive education which touches us in time, but is as remote as the other in its evolutionary character.

Sources of information.— Various primitive tribes to-day either have been untouched by modern civilization, or have been so little affected that their primitive customs can be easily discovered. They thus give us much insight into prehistoric life, as they represent a similar stage of development. This chapter will therefore reinforce important parts of the first chapter and will add new elements. If it repeats somewhat, it does so from new view-points,— first from view-point of actual observers, second from that of new tribes.

These tribes which are to be considered represent various grades of civilization, all of which may be called primitive, but we need not differentiate, except in certain particulars that will be evident in the course of discussion. As this is not a study in anthropology or ethnology we are concerned only with such details as bear particularly on the matter of training that the community supplied for its children.

Acquisitions and inheritances.— The most primitive peoples with which we are concerned here have advanced slightly beyond the tribal stage to a loose organization, seen in the meetings of elders from different tribes to consider general interests.[1] Other tribes have developed ideas of more definite organization,— ideas of nationality, generally of monarchical type. In industrial lines we find the simplest pursuits, whether

[1] Appendix, 2, 5; Spencer and Gillen, Native tribes of Central Australia, 272. See also the same author's Northern Tribes, 24, 27, 70.

in the domain of agriculture or that of handicrafts.[2] In rudimentary science we find, first, simple number ideas [3] that may be best understood by reference to two or three typical number systems. The most rudimentary type seems to be that in which there are no special names for numbers, simply group names, so that reckoning is by "hand"; (a hand = 5; 2 hands = 10); by "man" (2 hands + 2 feet = 20), etc.[4] The next type seems to be that in which they have special names for the first three numbers and by repetition and combination reach five or six and then use the devices given above with the aid of the special expressions. A third type would include more special names or a higher counting capacity (say, 200, 300, etc.), or both. The counting power is sometimes steadied and enforced by means of tallies (notches in sticks, knobs, sticks in sand, etc.). Everything therefore is concrete, as might be expected. The abstract is beyond the menal grasp of primitive man.

Knowledge of nature and the healing art.— Under the head of rudimentary science should also be included their observations of nature that were many and accurate,[5] and the beginnings of the medical art,[6] with its magic and superstition.

Religion.— In religion we find animism and fetishism widespread.[7] One of the most fundamental and striking forces in religion is the totem,[8] from which a whole system of totemic religion has grown. Naturally, with their crude ideas, superstition and magic arts also appear as a part of their religion. But we also find definite ideas of gods apart from the totemic system, at least in certain places, and a belief in a future existence. In connection with all this they have a wealth of

[2] See Ratzel, History of Mankind; Featherman, Social History of the Races of Mankind; Letourneau, L'Evolution de L'Education.

[3] Appendix 10. Letourneau, *op. cit.*, 134.

[4] All this indicates that number development was originally digital.

[5] See Hewitt, *op. cit.*, Spencer and Gillen, *op. cit.*, 24–26, and books on primitive tribes generally.

[6] Letourneau, *op. cit.*, 155, 234.

[7] Appendix 1; Ratzel, *op. cit.*, II: 353, 355–357, 481; Featherman, *op. cit.*, I: 161–2; Spencer and Gillen, *op. cit.* 123, 124, 138, 310, 311; Letourneau, *op. cit.*, 141, 142.

[8] See Appendix I.

religious legends (history to them), and religious ceremonies and ritual.[9]

Folk-lore.— Folk-lore there is in abundance.[10] One department of it has just been referred to. We also find proverbs, aphorisms, riddles, fables, general legends, astronomical fables and myths, myths concerning gods, beast-legends, war-songs, hero-tales, and tales that point to migrations and amalgamations.[11] In this connection reference should be made also to pantomimes and burlesques,[12] of which primitive peoples seem fond. The wandering minstrel reinforces local story-tellers [13] in the transmission of the mass of stories that this list suggests. But he is not always the honored guest we find him among the Greeks. Featherman, in his account of African races, tells us of " wandering musicians who dress up in fantastic style, put on all the emblematic mummeries of magic art, and recite in recitative strain all the incidents of their travels, but are looked upon with despite as selling charms for hire. " [14] However, we may not have here a real " minstrel " corresponding in function to the rhapsodist; but the latter is found among primitive peoples.

Art.— Rudimentary art is very conspicuous among these tribes. Their interest in graphic expression is instinctive.[15] The necessity of expressing themselves finds this one of the simplest and most natural means, as it gives them some of the simplest and most suggestive symbols. They thus readily practice drawing and carving, but in a limited field, for they have a predilection for figures of animals and men; a landscape passes their comprehension. In some cases they have made great progress in design and show real artistic sense.

[9] Appendix 2, 3, 5, 7; Spencer and Gillen, *op. cit.*, 145, 229–30, 323–24, and generally Chapters VII–VIII.

[10] Appendix 10; Featherman, *op. cit.*, I: 355–56; Ratzel, *op. cit.*, II: 276–279, 327, 480; Spencer and Gillen, *op. cit.*, 145, 229–30, 310, 311, *et passim;* Letourneau, *op. cit.*, 119, 135, 153, 230.

[11] Ratzel, *op. cit.*, II: 250, 260; Featherman, *op. cit.*, I: 355.

[12] Spencer and Gillen, *op. cit.*, 228–30, 334 ff., 336, 352–3, *et al.;* Featherman, *op. cit.*, I: 355–56; Ratzel, *op. cit.*, II: 480; Letourneau, *op. cit.*, 119, 135, 217, 230; Appendix 10.

[13] Featherman, *op. cit.*, I: 355–56; Ratzel, *op. cit.*, II: 480; Letourneau, *op. cit.*, 119, 135, 217, 230; Appendix 10.

[14] Featherman, *op. cit.*, I: 23.

[15] Appendix, 1, 2, 10; Letourneau, *op. cit.*, 47, 58, 69, 122–23.

Physical facts.— The physical man is not neglected. Besides the spontaneous exercise which his life suggests and enforces, primitive man has universally practiced himself in the dance.[16] Rhythm, as indicated before, is an instinct. Gesture wonderfully attracts and meets with ready response. The dances thus minister to religious ceremony, which is highly developed in these tribes, to primitive impulse for the motions involved, and perhaps to the social instinct. At least they are a most characteristic part of life, and every true tribesman must train himself in them. Then the tribe prescribes special physical training for its new members, and lays particular emphasis upon physical tests involving severe physical strain,[17] to which the boy must be subjected before becoming a member of the tribe. Primitive peoples spontaneously provide for certain physical qualities to be developed in new tribesmen.

It is not necessary for us, in the present connection, to elaborate these topics in great detail. It is sufficient to know that the most primitive peoples have accumulated a variety of experiences that may be grouped into several classes.[18]

Education of the child and of the adolescent.— Some of the simpler accumulations are naturally and inevitably appropriated by children. The most vital of them are studiously reserved for adolescents,[19] and their mastery is the culmination of youthful achievement, or the initial step in full manhood. While we are not concerned directly with elementary education, a brief reference to it will give a better basis for the study of adolescent education and will at the same time help us to gain a clearer conception of it. In order to fully appreciate this earlier stage of education we must keep carefully in mind what was said in Chapter I as to the point of view of primitive peoples, their ideals, and their aims.[20]

[16] Appendix, 1, 7, 10; Ratzel, *op. cit.*, II: 480; Letourneau, *op. cit.*, 120, 134, 217. See also Featherman, *op. cit.*, and Spencer and Gillen, *op. cit.*, 381.

[17] Appendix, 2; Ratzel, *op. cit.*, II: 394–5; Featherman, *op. cit.*, I: 623; Spencer and Gillen, *op. cit.*, 271–2, 347, 380, 450 ff.; also Chapters VII, VIII; Letourneau, *op. cit.*, 153–4.

[18] See page 30 f.

[19] Appendix, 2; Spencer and Gillen, *op. cit.*, 145, 229–30, 309; Letourneau, *op. cit.*, 153–4.

[20] Chapter I, pp. 8, 9.

The aim in elementary education.— The aim in primitive elementary education is a general one. Aims do not become fully definite and purposeful till the secondary period. Means are the simplest and most natural. There is no definite organization. The whole process may be said to be largely spontaneous. Observation, imitation, play, participation, showing, rote-learning[21] comprise the method, which is ready-made, not studied; a gift of nature, not planned. In this way are taught the simplest facts and processes needed for life in the tribe,— the elementary and more necessary portions of the race acquisitions that have been outlined.[22]

Different types of elementary education.— As was suggested in Chapter I the simplest form of education seems to be that which is purely spontaneous, through imitation and play. The initiative comes from the children,[23] as they are left largely to themselves. The next stage is very similar, but has the additional element of participation in the work of parents. A third stage is reached when the parents make definite efforts and plans (family) to teach their children the necessary operations of life.[24] The fourth stage is that in which special teachers for training the young,[25] — clan members, elders, priests,— are provided. Education seems to move from the type in which the elders are the repositories of all the learning of the race to that in which priests are supreme.

Discipline.— It is interesting to note also that in primitive life there is no conception of discipline in the sense of supervision and government, including corporal punishment. Corporal punishment is not a relic of barbarism, but a product of civilization. In the most primitive races the children are practically abandoned to govern themselves, and for a consider-

[21] Appendix, 10; Letourneau, *op. cit.*, 134, 151.

[22] Method and scope of training are indicated in Letourneau's accounts of Australians, New Caledonians, Hottentots, East and West Africans, Polynesians, Tartars, Malays; in Ratzel's and Featherman's descriptions of African and Eskimo life; and in Spencer and Gillen's Studies of Central Australian Tribes. Appendix 10.

[23] Featherman, *op. cit.*, I: 514–15, 599; Letourneau, *op. cit.*, 133–134, 153; Appendix 10.

[24] Appendix 10; Featherman, *op. cit.*, I: 427.

[25] Appendix 10.

able distance up in the evolution of education discipline is mild and lax, "douceur," as Letourneau puts it. When, however, training becomes a more conscious process, careful surveillance becomes prominent, and punishment, admonition, and exhortation suggest themselves as the readiest means of moral training.

Secondary education.— Primary education is just what we might expect, natural, informal. We need not dwell further on it here. Secondary education, while sharing some of its characteristics, is radically different from it. Aims and ideals have become fully conscious and definite. The knowledge to be imparted is carefully defined. Method is the object of great care. It has been carefully planned and is very precise. To get at its real meaning it is more essential here than in discussing elementary education to recall and impress primitive ideals and aims dwelt upon in Chapter I.[26] Briefly the plan is this: —

1. The boy is to be capable of representing and supporting clan or tribe mentally and physically. He must master the facts, ceremonies, and lore that are most essential in maintaining the forms of life and thought characteristic of his social and political environment.[27]

2. Special localities are chosen for the most impressive parts of the educational process.[28]

3. The boys are separated from the women,[29] who have no part in the most characteristic details of the proceedings, and they are taken in charge by picked men, while the whole proceeding is directed by "headman" and elders. It is interesting to find that there is a union of tribes in this course of education and that the occasion is taken advantage of for intertribal meetings of elders.[30] This, of itself, adds force and impressiveness to the ceremonies and to the training that the boys now receive. Amid silence (on the part of the novices),

[26] Chapter I, pp. 8, 9.

[27] Featherman, *op. cit.*, I: 413, 514–15, 580, 623; Spencer and Gillen, *op. cit.*, 139–40, 213–18 ff., 271–2, 310–11; Letourneau, *op. cit.*, 134; Ratzel, *op. cit.*, II: 370. See Appendix 2, 3, 7.

[28] Spencer and Gillen, *op. cit.*, 139–40. See Appendix 2.

[29] Appendix 2.

[30] Appendix 2; Spencer and Gillen, *op. cit.*, 272.

awe and mystery, amid apparent manifestations of the spirit forces, with occasional weird sounds from the bull-roarers in which dwell ancestral spirits,[31] the most vital and carefully guarded items of the tribe's acquisitions and the most sacred part of tribal history are impressed on the boys, and they receive on their bodies the tribal symbols and assume the characteristic articles of man's dress.[32] After the special ceremonies it is not uncommon for the boys to pass a time in the "bush" supporting themselves, and sometimes, at least, receiving further instruction from the "elders."[33] During the initiation also the boys may be taught a new name and a mystic language.[34] We must not suppose the exercises are necessarily brief; they are never such. They are sometimes distributed over years. A candidate for tribehood, too, may be, and frequently, if not always, is required to be present at more than one such occasion as has just been referred to, before becoming a fully initiated "man."[35] He probably is not always required to go through the ordeal a second time, though this fact comes out definitely in one case which is recorded.

That which forms what we may call the subject matter of this training will be found to connect itself particularly but not exclusively with religion, physical power, and folk-lore. That part of the initiatory proceedings or teaching which is connected with the physical boy is very conspicuous, but not on that account as important as some other elements of the training.

Physical marks and tests.— This latter topic needs a few additional words to emphasize what, it is fair to assume, is the fundamental conception connected with it. Under the head

[31] Appendix 1, 2; Spencer and Gillen, op. cit., 139 ff., 149.
[32] Appendix 2; Featherman, *op. cit.*, I: 9, 566–67.
[33] Appendix 2, 4, 5; Spencer and Gillen, *op. cit.*, 347.
[34] Appendix 4, 5, 6; Spencer and Gillen, *op. cit.*, 139, 140.
When tribe was enemy of tribe and the possession of secrets by another tribe might have tragic consequences, secrecy was a necessary tribal policy. Hence it is not strange that women did not participate in the mature business of the tribe, aside from any influence coming from early conceptions of woman's position. In war they would be captives and might jeopardize tribal interests by divulging tribal secrets either voluntarily or under stress. The mystic language may have special significance here, as Mathews suggests.
[35] Appendix 3.

of physical we may place three classes of experiences,[36] 1°, body-markings, 2°, mutilations, 3°, severe physical strain or suffering. We may assume that there are two ends in view. Thus, 1° and 2° probably have for their object the assimilation of the individual to the totem of the tribe; certain changes of the body (especially of the mouth and head) are necessary to give him some resemblance to the animal that represents the totem. The tattooings of various kinds and degrees, gashings, incisions, and cicatrices, are perhaps totemic signs and symbols; at least they are tribal. It has perhaps been common to regard the second class of experience (mutilations) as mere physical tests, to prove the boy before admitting him to the tribe, but it is more significant, and more in accord with what we know of race development, to regard them as totemic in origin. The third class of physical experiences may probably be regarded as purely physical tests or examinations. It is possible that they came in later after the significance of the second class had been lost.[37]

Results of this training.— From what has been said it is evident that the result of such training gives a high degree of efficiency to the powers of observation and to memory, especially the latter. Much of the ceremony of initiation is calculated to stimulate attention incisively even painfully and this is one of the prime conditions for strengthening the memory, or better, the memories. There is practically no training of the intellectual powers further than has been noted, but this secondary education has a distinct effect on moral development, in fact is intended to have, giving courage, self-control, respect for authority, and other qualities, as Spencer and Gillen show from a study of primitive tribes in Australia.[38]

If it be thought that too much definiteness and purposefulness has been assumed in the matter of secondary education among primitive tribes,— that much has been "read into" their plans, that a scheme of education has been "made up," a brief

[36] Appendix 2, 10; Featherman, *op. cit.*, I: 224, 407, 566–67, 580, 623; Ratzel, *op. cit.*, II: 106, 111, 394–5, 466, 470; Spencer and Gillen, *op. cit.*, 272; Letourneau, *op. cit.*, 153–4. See also references on page 13, note 35.

[37] Plato, Republic, 413–14.

[38] Spencer and Gillen, *op. cit.*, 272; Appendix 10; Letourneau, *op. cit.*, 199, 217, 221.

study will show that the evidence justifies even stronger statements than have been made. Mathews' account of initiation ceremonies among Australian savages may be taken as a basis.[39] It shows that there is a very definite course of instruction. Spencer and Gillen's studies show that secondary training initiates the boy into the early (mythological) history of his race, into totemic secrets, and into complicated ceremonies and dances that are, according to their crude notion, vitally related to the prosperity and life of the tribe. These accounts are reinforced by the mass of facts as to primitive life and education gathered by Ratzel and Featherman in their accounts of African, Australian, and Eskimo life, and by Letourneau in his *L'Evolution de L'Education*.[40]

Primitive secondary education compared with modern secondary education.— Thus the impression grows that these primitive folk have aims and ideals in " secondary " education more clearly defined than ours (and naturally so in the absence of such complexity as faces us), that the course of training is sharply defined and fixed and is the object of unwavering faith, and that their method is clearly-cut, uniform, and well adapted to their purpose. Mr. Tozzer of the Peabody Museum, Cambridge, was initiated into the Navajo Indian tribe. His account of the initiation ceremonies of the Yei-bi-tsai, which he kindly gave in a personal interview,[41] illustrates and enforces all these points and affords a fine example of the definiteness of primitive adolescent training. The high school, as has been said in Chapter I, is simply the primitive secondary school modernized. The change has come particularly in subject matter and method. The primitive aim and our aim, stated in general terms, would be almost identical, as must be evident from what has been said in this chapter. Their aim, however, has a more definite meaning for them. Their education is systematized, in a way, as well as ours, and has all, or practically all, the elements that are found in our high schools. The difference between our secondary training and theirs does

[39] Appendix 2, 3, 4, 5, 6.
[40] Appendix 10, which gives many references for different items of education.
[41] Appendix 7.

not lie so much in the fact that any of these elements of school-life are absent in primitive education, but in the fact that they have grown in scope and complexity since then, that ideals, subject matter, and method have adapted themselves to changing conditions, though somewhat tardily, because of the conservative nature of education.

A variety of illustrative material as to primitive education of to-day will be found in the appendix and marginal references. If all the evidence is carefully studied, it will be found to support the conclusions as to prehistoric education given in Chapter I. Support will grow stronger as we advance.

Summary of primitive secondary education.— The main points of this chapter may now be summarized in the following outline; but it should be noted that the general classes of subject matter referred to are found in both the primary and the secondary period. The most characteristic parts are reserved for the adolescent boys.

Education in the secondary period: —

Aim.— Insight into the choicest knowledge of the tribe. Strong impressions of most important tribal characteristics and customs. Induction into full citizenship. *Education into the life of the tribe.*

Analysis of curriculum: — More serious and secret elements of the following:

Industrial facts: — Elements of occupations. (This suggests manual training).

Social and political facts: — Knowledge of and full participation in clan and tribal life (organization, councils, etc.). (The foundation of civics.)

Religious facts: — Primitive ritual. Particularly totemic ceremonies and signs; facts as to Churinga (bull-roarers).[42] All characteristic ceremonies. Magic. (The beginnings of religious instruction are seen here,— now made a regular and very important part of the curriculum in several continental systems.)

Folk-lore: — Tales of ancestors and histories of totems. Songs. Practical knowledge gained through experience of tribe, treasured by old men and handed on. Sometimes a special totem name with all its significance, was given to the individual; sometimes a new language was taught. (The basis of language and literature.) Note also tabulation on pp. 6 ff., 23, 35.

[42] See Appendix 1, 2, 7.

Nature facts: — Close observation of nature enforced and vivified through intense relations of men to natural phenomena and to nature's supplies. Knowledge treasured and transmitted in easy formulæ. (The rudiments of the natural sciences.)

Number: — Simple concrete facts. Few particular ideas. Limited series, perhaps up to 5, and then by 5's and 10's. (The rudiments of mathematics and exact science.)

Art: — General symbolism of tribe. Participation in making sacred objects (see sand-paintings of the Navajos). Body-paintings. Drawing. Carving of useful and ornamental articles. (Beginnings of drawing and art, with further suggestions as to manual training.)

Physical training: — Physical tests trying nerve and muscle. Body-markings,— tattooing, incisions, cicatrizing, teeth-breaking, etc. Dances. (An early stage of physical culture.)

As we follow the training of the adolescent we can thus easily detect our modern curriculum in outline, for its foundations are plainly visible.

Method.— (1) Observation — imitation — practice — participation.

(2) Impressive initiation ceremonies exciting the highest degree of attention, and thus reinforcing memory. During these ceremonies there is a sustained effort to give definite instruction and practice (of a rude sort) in matters of intimate concern to the life of the tribe.

(3) Full participation in the life of the tribe,— at least after a period of probation.

General characterization of primitive secondary education. — From the two studies summarized in Chapters I and II it appears that primitive peoples, while leaving the education of young children to nature and natural conditions, had and still have a definite aim and a studied plan of training in the case of boys of secondary age. The plan involves the conscious adaptation of method and matter to the aim,— in a word organization of a very definite sort. The education of adolescents had in view two distinct and yet closely correlated objects, 1, the mastery of the choicest knowledge inheritances of the race, so presented as to strike the more fully developed imagination of youth and inspire the boys under training with the importance of the impartations; 2, vocational and civic training, which, though simple in character and scope, because of the simple and limited nature of tribal life, was as essential for existence as the more

detailed vocational training of to-day. All this training was conducted by a group of men well fitted by age and experience to induct the new candidates for citizenship into the characteristic ideas and forms of the tribe. This education was thus public, not private. It was a community concern. The organization of education was tribal. In this primitive secondary school the main features of secondary education, which were so familiar in later ages, were already visible.

APPENDIX

1. In connection with primitive tribes it is necessary to keep in mind two characteristic features of their life and thought: —

A. **Totems.**— Ideas connected with their totems,— natural objects, generally animals or trees (but not necessarily these only), which they think were their first ancestors. The totems have certain signs or symbols that appear conspicuously on men's bodies or on prominent objects in the community. More than this, boys are often assimilated to these objects by dress, arrangement of hair, or bodily changes. The totem is one of the most fundamental conceptions among primitive races.

B. **Churinga,—"Bull-roarers."**— The second feature is connected with the first. It is the "bull-roarer." Spencer and Gillen give an interesting account of this object in connection with the Alcheringa,— a name applied to what was to them the beginning of time, the period when their first ancestors were formed. These ancestors were so intimately associated with the totems that one of them is sometimes called kangaroo-man or man-kangaroo. The human idea is often sunk in that of the animal or plant from which the man is supposed to have sprung. The history of the tribe began here with these semi-human ancestors having unique powers (as compared with their descendants), which were exercised in part in producing some of the striking geological features of the region. In connection with these Alcheringa ideas, perhaps, or as another version of the doings of those times, we find the story of the creation of men and women from plants and animals through some transformation, making rather inchoate individuals who dwelt in groups along the shore of the Salt Sea that originally covered part of the country. (120 ff., 388.)

Now early races were impressed with the spirit part of the individual, which they objectified in different ways. The spirits of these Alcheringa ancestors were closely associated with certain rounded, oval or elongated, flattened stones and slabs of wood of various sizes (with sides flat and concave, or concave and convex), called churinga. In fact it was supposed that the spirits resided in these objects, and that when a child was born in the tribe, the spirit was reincarnated, the child thus possessing the churinga of the ancestor and of course belonging to his totem, without regard to the mother's totem. Naturally these

churinga were decorated with special symbols or devices, the device being "generally a conventional arrangement of circular, semi-circular, spiral, curved, and straight lines, most frequently a series of concentric circles, or a close-set spiral." (145.) They were preserved with great care and secrecy. The location of their depositaries and the stories connected with them became an important part of the knowledge of the tribe that was kept from all but the duly admitted male members. The smaller of these churinga were called bull-roarers. They, like some of the others, had holes bored in one end, perhaps because of a tradition that the Alcheringa men used to hang them up. Strings were attached to the bull-roarers, and a quick whirling in the air produced weird music that added a striking element in ceremonies. It is well known that such objects have in modern times become playthings. Many a one can look back to them as interesting objects of amusement, another illustration, as Haddon suggests, that serious religious objects of primitive times have become the playthings of modern times. We might say that one early educational force has been transformed into another, which, though less impressive, has still some educational value, — is really a part of a great series of educational forces which are of great import in early years. (This account applies to Central Australia, but it is useful for general knowledge of these objects.)

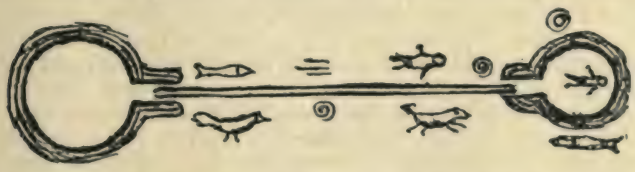
2. **A primitive secondary school.**— Mathews in several articles gives detailed descriptions of initiation ceremonies. Here is an outline of the Bunan of South Wales that he describes in the American Anthropologist 9: 327 ff.

(1.) Ceremonies serving as a signal that a Bunan is to take place.

(2.) Selection of the place.

(3.) Meeting to talk over general interests of the tribe and to determine details of the Bunan.

(4.) Bunan ground prepared, the main elements being, (a) a large circular place cleared, surrounded by a low embankment with a single opening; a pathway leading from the opening to a second circle about a sixth of a mile distant made like the first, but smaller; the path bordered on each side by an embankment for a short distance from the circles. This diagram will illustrate some of these points.



(b) Beside the pathway, in the smaller circle, and elsewhere were various figures and devices made by heaping up earth or cutting (these probably representing totem animals and signs, at least in part).

(5.) Messengers summon tribes to attend.

(6.) Tribes gather, bringing their novices to be initiated. (The

Bunan is not for the single tribe in whose district it occurs. Various tribes are united in it.)

(7.) Headmen and followers examine ground and devices.

(8.) Boys taken away from the women.

There are eighteen distinct movements up to this point, all attended with characteristic forms. These, or at least the most striking of them, are here grouped under the eight heads. The "bull-roarer" is a common accompaniment for certain parts of the initiation ceremonies and continues to be used throughout the Bunan. Frequent corroborees (dance ceremonies) also are held.

Now follow various movements and ceremonies with the boys, which, in the case in hand, may continue for three or four days. The boys, till near the end, must have heads bowed, or covered, or both (except of course where the purpose of the Bunan may require a temporary removal of this restriction, if we may judge from a similar ceremony in another place, though Mathews expressly says that in the present case the boys were kept in this position till near the end of the ordeal). During the entire ceremony they must not speak.

Most of the letters of the alphabet would be required to designate separately all the observances in this part of the Bunan, but they may be condensed and summarized as follows:—

A. Before leaving the vicinity of the circles they see the devices, peculiar dances about them, and some feats of jugglery by doctors and wizards.

B. They go into the bush where they observe, amid special forms calculated to impress them, various performances that, for the most part, are probably symbolic,—dances, games, pantomimes, incantations, and imitations of nature. One of these seems unique in this region. It consists of swaying motions in special directions, accompanied by certain sounds, all intended to imitate the "breaking and recoil" of waves on the ocean shore. A tooth is knocked out, with peculiar forms.

C. Finally they turn toward the original camp, or rather a new one made in their absence by the women assisted by the men left behind. On the way the bull-roarers are placed in the hands of the novices for special examination,—a large one, the jummagong, used in the initiation ceremonies, and a small one, the mooroonga, for general tribal summoning. The boys are now painted, each with characteristic devices peculiar to his tribe (probably totemic symbols), and assume the belt and kilt worn by men. (The men have been painted and decorated earlier, before the beginning of the ceremonies, and now repaint themselves.) The concluding ceremonies of the Bunan gathering take place in a special enclosure near the new camp, and in a special camp for the boys where the old men impress upon them certain interdictions as to the flesh of animals (probably totems).

D. The final ceremonies of initiation however take place at the homes of the several tribes, when the boys, after a life of perhaps some months in the "bush," winning their own living (and perhaps receiv-

ing certain instruction), go through certain forms and are removed from all restraint, but not from all restriction. Before the latter occurs the boys must be present at several Bunans or reach a certain age.

3. **More facts as to the primitive secondary school.**— In his article on initiation ceremonies of Australian tribes, in Proc. of Amer. Phil. Assoc. 37: 54 ff., Mathews tells us that the novices' view is concealed part of the time. They are shown marks and objects, and taught folk-lore connected with the nation. There are burlesques and songs every day, and there are dramatic representations of a crude nature.

The novices after initiation are kept under control of their seniors for a considerable time, and must conform to certain rules laid down by the headmen. They must also attend one additional Burbung (the name of the initiation ceremony in this case) or more, before they are thoroughly acquainted with different parts of the ceremonial and are fully qualified as tribesmen.

4. In his article on the Toara ceremony of the Dippel tribes of Queensland, Amer. Anthropol., 1900: 139 ff., the same author says that while in the "bush" the novices are taught a mystic language understood by none but those who have passed through the prescribed course of instruction.

5. Mathews' article on Phallic Rites and Initiation Ceremonies of South Australian Aborigines (Proc. of Amer. Phil. Soc. 39: 622 ff.), gives these interesting items: —

During the long sojourns in the bush (with the old men), after each ordeal, the boys are permitted to see or listen to certain dances and songs, the secret lore of their forefathers, and stories of the traditional customs of the tribe. A mystic language or vocabulary is also inculcated, known only to the initiated. Every man and woman, all animals, plants, and surrounding objects, and the principal places in their hunting grounds have secret names by which they are spoken of among the initiated, in addition to the general nomenclature with which the women and children are familiar. After the novices have passed through the final stages of the inauguration rites the instruction by the elder tribesmen is continued for many years at the single men's camp at which the catechumens have now the right to be present.

During initiation in the bush with the old men the boys are shown the sacred bull-roarer and certain crystalline quartz stones supposed to protect, or in some way to bestow magical powers on the possessor.

6. We should also note the following items from the same writer's article on the Origin, Organization, and Ceremonies of Australian Aborigines, in Amer. Phil. Soc. Proc., 39: 556 ff.: —

Youths are instructed in customs and traditions (perhaps of their conquerors originally), are shown many things entirely new and are taught another language. Personal names are changed,— kept secret from all women of tribe. Mathews explains a part of the initiation

ceremonies by supposing they grew out of circumstances attending wars and raids. He suggests that ceremonies are kept secret from women, because in war women belong to the victors and would carry the secrets to the enemy.

He says also that pubertal boys are deeply scarified on shoulders and on muscles of breast and thighs.

7. **A Navajo school.**— Mr. Tozzer of the Peabody Museum, Cambridge, Mass., has been initiated into the Navajo tribe of American Indians. He gave an account of initiation ceremonies in that tribe in a personal interview,— from which the following notes are taken.

Before puberty children pick up in a natural way, through observation, imitation, and showing, the common facts of tribal life,— method of weaving, etc. There is no writing and so no formal education at this period. Young children are present at a ceremony with the "sand painting." The priest utters a sharp cry of the god, gives a drink from a gourd containing the sacred liquid, and transfers his hand from the god's head to that of the child. The latter is naturally awed and even terrified at the ceremony.

There is a nine-day ceremony called the Yei-bi-tsai or night-chant, during which boys and girls are initiated. The ceremony used in initiation must be passed through four times during life, the first time about the age of puberty. In this initiation ceremony the boy sees men dressed in a definite order, the culminating act being the placing of the mask, that really transforms men into gods with the power of gods. Certain rules must be followed as long as the mask is on (there must be no talk, etc.). Before this the novices have supposed that those who appear as gods are real gods who have come down from heaven. The ceremony gives them a new view and a new attitude toward belief. The gods are men personating gods, but still possessing the real attributes and powers of gods when dressed to represent them. The boys also hear and see the complicated ritual, including dances, songs, and prayers, the most vital parts now for the first time, and all at near view for the first time. These things, or at least the most sacred of them, take place in a circular earth hut thirty feet in diameter, called the Hogan. Near by, under the guidance of the old men, they practice all the ritual, till, by constant repetition through this and the succeeding initiations, each practically covering the same points, they become perfected and can conduct the ceremonies themselves. In the Hogan the boys practice "sand-painting" under masters in the art, and subject to the correction (and even bantering) of master and companions. The painting is planned on a large scale. It is shut in on three sides by feathered poles (representing breath or spirit), but is left open on the east. It represents the gods; every line almost is symbolic. It is used in healing ceremonies and for the ceremony with young children that has been referred to.

The real initiation consists of the pollen and yucca ceremony, in which pollen for the girl and yucca fibre for the boy are transferred from

the god to the body, touching various parts and even making some figure. Girls are initiated as well as boys, but they take no part in the dances and are excluded from certain parts of the ceremony. They are seldom in the Hogan, except for healing (no one enters it till the initiation period); otherwise their initiation is similar to that of boys.

8. **Other descriptions.**—"Time after time, when the Ertnatulunga (depository of churinga), is visited, the churinga are rubbed over and carefully explained by the old men to the younger ones, who in course of time come to know all that the old men can impart, and so the knowledge of whom the churinga have belonged to and what the design on each one means is handed on from generation to generation." (Spencer and Gillen, 145.)

9. "The sustained interest" in the Engwura ceremonies, which "were enacted day after day and night after night . . . was very remarkable when it is taken into account that mentally the Australian native is merely a child who acts as a general rule on the spur of the moment. On this occasion they were gathered together to perform a series of ceremonies handed down from the Alcheringa, which had to be performed in precisely the same way that they had been in the Alcheringa. Everything was ruled by precedent; to change even the decoration of a performer would have been an unheard-of thing; the reply, 'it was so in the Alcheringa,' was considered as perfectly satisfactory by way of explanation." At the same time we find that some changes have been made. (Spencer and Gillen.)

10. **Summarized references to Letourneau, with some ideas suggested by the study:**

Art instincts,—47, 58, 69, 114, 125–6, 159, 187 ff., 226. See also 37.

Discipline; parental control,—84, 139, 165, 169, 174, 179, 180, 181, 199, 206.—Success in moral training as compared with scholastic training,—54, 217–19, 238.

Folk-lore; wandering minstrels; story-telling gatherings,—126, 128, 135, 153, 203, 230.

Initiation ceremonies,—40, 41, 53, 85, 86, 134–5, 153–5, 207–8.

Instinct for rhythm, gesture, etc.,—126, 158, 205, 213–4, 217.

Memory, prominence of; weak attention; attitude toward abstractions and generalizations; rote-learning,—44, 54, 59, 127, 128, 203, 232, 233, 243, 248, 249.

Number power,—37–8, 47–8, 59, 67, 123–4, 146, 184, 200–2, 237.

Observation, imitation, play, participation, etc.,—39, 46, 60, 66, 74, 83, 101, 116, 118, 121, 122, 133, 138, 143, 150, 151, 153, 165, 174, 226, 238.

Oratory and oratorical training appearing at an early stage in civilization with freer and wider political status.—84, 85, 126, 135, 176.

Parental education,—40, 46, 53, 116, 118, 122, 133, 143, 151, 152, 153, 165, 171, 174, 180, 198, 199.

Special arrangements for education,—83, 84, 153, 171.

Spontaneous education,—39, 58, 60, 66, 74, 101, 121, 134, 138, 142.

As civilization advances among primitive peoples knowledge, instead of being vested in old men, is vested in special functionaries,—priests, —183.

A study of education among primitive peoples suggests the idea that making education the privilege of a class is a savage trait, or a characteristic of early stages of civilization.

III

SECONDARY TRAINING IN HOMER AND HESIOD

Leaving primitive life of to-day and primitive life of prehistoric times, which, in a way, explain one another, we take up the study of records coming to us from the border-land of the prehistoric and the historic, which at once hark back to more primitive times, give a vivid picture of contemporary life, and look forward into the future.

Educational value of these epics.— The Homeric poems are very interesting from a literary view-point, for they represent the culmination of ballad literature. For our present purpose they are interesting because the ballad relics that they contain give us glimpses of the past and afford us some clue to the educational forces at work in early times. The hints as to education that they give, however, apply particularly to the families of the chiefs whose life they portray. "The people's lot was hard," and their education far more limited and primitive. Hence, while the education that is outlined in this chapter is of a primitive type and will apply, in its general features, to the whole population, there are many features which concern only the special class. This limitation must be kept before us as we look into the educational agencies of the times.

Social and political organization.— Organization and acquisition in Homeric times have much in common with what we have found in previous chapters, but we have evidently come to a new epoch. Political organization is more complex. Several social and political elements appear, each influencing thought and movement. King, council, agora have become clearly defined. It is to be noted that the general body of the people has its force, however small. That the force is not insignificant appears from a brief and significant Homeric sentence,—"The people's voice is stern."[1] While the sev-

[1] Odyssey, XIV.

eral factors of organization are by no means coordinate, the mere fact that they exist is very suggestive and indicates the appearance of new educational forces and wider participation.

The family also has grown. The Homeric family has added a slave element of nurture. The slaves were often high-born individuals who had suffered the misfortune of being kidnapped in the freebooting life of the nobles of the period. Later, when formal education had come in, they were often the regular tutors of boys. Now they had their part in the more informal education of the times. With this high-born slave accession and all the attendants of a large estate the family has become a small village, and, with its varied interests, is broader and more educative than the primitive family.

Change in ideals.— But changes have gone farther than this. Growth in ideals is seen most characteristically in the fact that the community unit is not so exclusive as in earlier epochs. While we know that it ruled, and ruled insistently, at a much later period than we are now studying, still even here we find the beginnings of individual initiative. The gens is still predominant. It moulds, commands and transmits as before, but with this important difference, that the individual stands out more conspicuously, pauses to consider, puts in a protest or suggestion, or even gives signs of moving in an independent course,— a spirit that, as the race evolves, is to add individual development to mere tribal acquisition.[2]

Educational aim.— The educational aim is thus a tribal one still,— to train a worthy member of the tribe or clan. But we must, in addition, look for greater individuality, and this perhaps comes out in the Homeric ideals embodied in the expressions, *speaker of words and doer of deeds; good manager and manipulator of estate or office.*

Growth in race acquisition.— As to accumulations and inheritances in the various lines mentioned in previous chap-

[2] Appendix 3, 17. "And the Assembly swayed like high sea waves of the Icarian main." Iliad, II. "Then to them spake Thoas, son of Andraimon, skilled in throwing the dart and good in close fight, and in council did few of the Achaeans surpass him, when the young men were striving in debate,"— Iliad, XV. See also Iliad III, VII; Odyssey, VI, XV.

ters, they have not merely been increased in number; there has been a great change in spirit and scope. Industrial forces represent a wider range of power[3] and thought. Practical arts show a striking advance over previous periods. Recent explorations in Crete and Greece have revealed surprising skill and perfection here. Applications to life have passed beyond necessity into the realm of luxury. Work was so thoroughly and massively done that it has defied time. The fine arts have shared in the advancement. They have taken on new forms and have developed a more pervasive esthetic feeling. In fact, over the whole life, even the physical, has come a kind of esthetic power whose real significance is seen best in the idea of symmetry, which Greece is eventually to bring into education.[4] Every nation has some art instinct; with the Greeks it first comes to full consciousness as an educational force. Religious feelings have lost something of their awe and sternness,[5] but apparently nothing of their impressiveness. They are freer and more social. Folk-lore has entered the bounds of literature. The physical life has become larger and finer and freer. A really wonderful civilization has been developed.[6] It is even declining, so that the period immediately represented by the Homeric literature has been regarded as a decadent one.[6] Early historic Greece was more primitive than the Greece of the Homeric epoch.

Educational forces.— The educational forces at work are therefore finer as well as more inspiring than those of genuine primitive life, because some of the weights have been removed and individual thought has more outlets. The people responsible for this have gathered up the best with new genius and

[3] Appendix 6, 19, 21; Iliad, II, III, VI, XI, XII, XVI, XVII; Odyssey, IV, V, VII, VIII, XII, XVII.

[4] Appendix 7, 9; Iliad, II, III, XVIII; Odyssey, IV, VI, VIII, XVII, XXIII.

[5] Appendix 4, 18; Iliad, I, II, X; Odyssey, II.

[6] See Schliemann's Excavations (Shuchhardt), and Baikie's Sea-Kings of Crete.

Incursions into Greece of course easily made possible the coexistence of two grades of civilization, a higher one belonging to a conquered people, a lower one due to the vigorous new people pushing on. Under such conditions the social status of a country has zeniths and declines in its cyclic development. At a later time the Roman Empire illustrated the same variety.

have made it better. There is new spirit, new outlook, and, correlatively, new insight.

Method.— The method that goes with this new education impresses one as freer. There seems to have been less of the awesome, less tension of mental and physical attitude. One feels that the province of rote-learning has been narrowed and that the process probably has now to do with mere form. But educational movements are conservative and retain all the past in method. Modes of procedure, like formulæ, are so deeply imbeded in human nature and so impressed through experience that they become natural modes of action and may hold sway far more widely than can be justified, because they do not enter the thoroughfares or even by-paths of thought, but work in the province of the unconscious or subconscious. We shall thus find each epoch clinging to methods that were evolved under other conditions and should have passed wholly, or in large part, with the conditions. It may be true, however, that each epoch contains some of the conditions of all preceding epochs, and that, therefore, we may always find some use for all ideals and methods which have appeared. They form threads in the weaving of the new, but are merely contributory, and find their mission in losing themselves in the new.

Without discussing the matter at great length, which is unnecessary, after the general discussions of the first two chapters, we may summarize the forces at work in this new period and briefly characterize ideals and method.

Education in Homeric Times.[7]

Prominent features or aims: — Speaker of words and doer of deeds. Good ordering of affairs (at home and in the state) — Kindly and intimate home relations.

No formal schools.— Education conducted by the following agencies:

1. Education through the family. Family organization patriarchal,— father, mother, children, slaves (chief slaves whose lot was most happy; common slaves). Children remain long at home, daughters till marriage, sons even after marriage. Hence we have the family in the large sense, really the nucleus of the

[7] Appendix 1–15, (summary of references to the Iliad and Odyssey bearing on the different phases of this topic.)

clan. Close and affectionate family relations very noticeable. Familiar and intimate relations of selected slaves with main family; slaves sometimes brought up with children. High consideration accorded woman; freedom; equality (but relics of marriage by purchase). High degree of culture in many ways. Table manners however very crude.— Large estate managed by household. Picture of life of nobles charming, enticing. Sharply contrasted with that of common people.

Home experiences and surroundings many-sided. Hence exercise and training on many sides. Children participate. Depended upon especially to continue line and honor and keep up life of home. Arms inherited and used.

Care, nuture, and training from parents, attendants; sometimes from guardians and prominent characters like Phœnix. Father chief factor in boy's life; mother in girl's. Tutelage long.

Home training supplemented by foreign journeys and expeditions; guest-friendships, comradeships.

2. Education through industrial environment: — Many occupations of the simpler sort,— most important being agriculture, pastoral pursuits, carpentry and ship-building, sea-faring, freebooting, leech-craft, seer-craft, primitive mining, metal work, textile work, household-craft.

3. Education through social and political environment: — Political organization simple but suggestive, offering considerable opportunity for training: — 1. King; 2. Council of Elders; 3. General Assembly. Power in each. Power of people indicated in Od. XIV, "The people's voice is stern."

4. Education through religious environment and into religious knowledge and history: — Many gods, concrete conception; gods interested in and intimate with men; confident and easy relations of men with gods; close contact influences men intellectually, morally, physically; men instructed, endowed, directed by gods. Gods worshipped by vows, prayers, sacrifices. Special forms of worship.

Various stories as to gods' history and relations with men.

Fate.— Spirits of departed.— Omens.— Dreams.— Soothsayings,— etc.

Motives in attitudes toward men and even toward gods often utilitarian. Home virtues strong, beautiful. Community virtues within the class comparatively high. Chivalrous conduct. Larger community virtues low.

5. Education through esthetic environment: — Palace.— Altars. — Objects of personal and home decoration and use, showing great artistic skill. Note especially textile work and metal work. Careful observation of nature aided esthetics greatly.

6. Education through folk-lore: — Songs, ballads (foundation of epics), race and hero tales; practical wisdom accumulated as the

race grew and embodied in business directions, in proverbs, etc.; careful and accurate observations of nature,— nature-lore. Old men "wise in ancient lore" much sought. The bard here reached his full development as an educational force.

7. Education through physical environment: — Plays, games, dances, training in arms, etc.

Method in education: — Observation, association, imitation, practice, participation.— Contrasts between child and adolescent frequent; striking characteristics of adolescent noted.— Attractive pictures of home life. Gradual development.

Suggestions from Hesiod as to Education.[8]

Additional points from Hesiod.— Still no formal schools. General educational forces same as in Homer. But Hesiod gives a picture of more homely life.

Some special points: —

A definite and systematic account of the origin of gods. A classification of gods. So an organized body of religious lore to be handed on. Also a systematic account of the origin and development of man, through five races or ages named from metals. In the second race, the silver race, "for a hundred years a boy was reared and grew beside his wise mother."

A body of precepts as to agriculture, etc., and a calendar indicating best days for various things. Altogether a considerable amount of folk-lore to be handed on.

He speaks of the value of rivalry, necessity of labor, and effort for attainment of virtue, all of which are educational. Hesiod's attitude is that of the practical man dealing with every-day conditions of life.

Education of the adolescent in this period.— All this is of much value for our study of the evolution of secondary education. It is not to be expected that poems, composed for the purposes that are evident in these cases,— especially poems evolving as the Homeric poems have evolved,— would go out of their way to speak of education. But incidentally (and incidental things are sometimes the best for our purpose), we get a good deal of information as to the influences at work and the subject matter that surrounded and affected the boy and called him to occupy and use,— a call which was enforced by custom and by the definite efforts of his superiors. From what we learn of the habits of antiquity, which have already been treated at length, we know that the secondary boy gained

[8] Appendix 16–22.

the best of this curriculum that was pressing on him. In Homer he seems to be regarded as a new individual [9] capable of a power, and requiring an education, different from those of the boy. The relics of ancient custom, which we find in the period to be treated in Chapter IV, also show that he was expected to have a training of his own,— especially, though not exclusively, physical, political, and religious training.

Formal schools there were none, any more than in the prehistoric period; individual training at home or in some friendly court or by some striking personality form the very simple organization for educational purposes, but back of it and in it was the social organization that gave the larger education.[10] The practice of sending the boy to a friendly court or to some skillful man indicates special training for the secondary period, for it is this, evidently, that is referred to in the various statements in question, or in many of them.

Homeric education was not primitive education, but it followed its general lines. Where it followed, however, it gave something vastly richer and broader. It seems also to have added one new feature. Besides the group of teachers who, as before, were simply men of experience, headmen, we begin to find the individual teacher with special qualifications, a man endowed with superior fitness for teaching young men. Shall we say that private education has been added to public education?

If we should go back to primitive Greek education, as we may by Homeric aid, by inference from stereotyped forms found in historic times,[11] and by analogy from parallel conditions elsewhere, we should find that adolescent education here was the counterpart of that described in our first chapters in purpose, in course, and in method, which culminated in striking initiation ceremonies. Greek nature, however, may have thus early relieved the austerity, solemnity, and formality which have been noted in primitive training, as it certainly did at a later period.

[9] Appendix 13, 23.

[10] Appendix 10, 11, 22, 23; Iliad, V, IX, XIV, XVI, XVII, XXII, XXIII; Odyssey, XII.

[11] See especially Chapter IV.

APPENDIX

Some references to Iliad and Odyssey on various topics.[12]

1. Ideals: — Iliad, 55, 174. Various parts of the Odyssey emphasize the well-ordering of affairs. Both epics are full of passages showing admiration of strength and stature and physical beauty.

2. Social organization: — Iliad, 43, 117, 137, 210, 262, 452; Odyssey, 14, 26, 37, 40, 41, 42, 50, 52, 68, 80, 84, 90, 122, 175, 178, 200, 219, 222, 233, 236, 241, 242, 244, 245, 250, 264, 272, 283, 304, 305, 307, 310, 312, 321, 353, 378.

3. Political organization: — Iliad, 2, 3, 16, 22, 24, 25, 27, 31, 45, 55, 138, 139, 163, 299, 381, 458; Odyssey, 15, 66, 89, 199, 201, 220, 244, 319, 328, 383.

4. Religion,— animism, gods, omens, dreams, seers, etc.: — Iliad, 3, 21, 22, 31, 47, 48, 86, 129, 192, 212, 236, 240, 266; references to gods, *passim;* Odyssey, 13, 20, 46, 166, 183, 246, 269, 304, 305, 308, 312, 318, 368, 370, 379.

5. Instruction by gods: — Iliad, 192, 282, 348, 458; Odyssey 88, 102, 124, 278, 279, 317, 363.

6. Industrial development,— general occupations, arts, crafts, etc.: — Iliad, 36, 38, 40, 42, 44, 47, 48, 50, 51, 55, 70, 71, 85, 112, 115, 117, 120, 124, 135, 169, 204, 205, 209, 210, 218, 225, 239, 243, 277, 329, 337, 365, 383; Odyssey, 12, 14, 47, 52, 79, 102, 115, 189, 219, 255, 273, 274, 297, 304–5, 373.

7. Physical development,— games, etc.: — Iliad, 45, 383–84, 458 ff.; Iliad has abundance of passages indicating strong physical development; Odyssey, 6, 45, 89, 90, 91, 113, 118, 281, 291, 362, 373.

8. Folk-lore and means of propagating: — Iliad, 16, 39, 122, 167, 175, 277, 381, 383, 384, 405; Odyssey, 6, 10, 11, 37, 45, 52, 63, 112, 118, 124, 175, 200, 242, 271, 273, 279, 280, 281, 291, 306, 353, 362, 376. Old men as repositories of knowledge: — Iliad, 138, 183, 266; Odyssey, 15, 371, 384.

9. Art: — Iliad, 53, 61, 120, 215, etc.; Odyssey, 47, 90, 175, 199, 269, 363, 372.

10. Parental education.— Close relations of parents and children, etc.: — Iliad, 2, 84, 119, 169, 225, 226, 259, 260, 266, 282, 351, 367, 395–6, 411, 449, 459, 493; Odyssey, 7, 14, 16, 48, 66, 67, 70, 84, 89, 170, 172, 178, 189, 201, 209, 217, 219, 234, 241, 248, 252, 253 ff., 261, 266, 292, 307, 308, 353, 368, 380, 385.

11. Education outside the home: — Iliad, 174, 175–6, 209, 226–7, 260, 320, 395, 396, 452; Odyssey, 234.

12. Child-pictures: — Iliad, 301, 314, 322, 367, 449; Odyssey, 26, 380. Much in this section may apply to social organization. Close relations between parents and children are evident. Intimate relations between the family and certain slaves also appear.

[12] Reference to Palmer's Odyssey; Lang, Leaf, and Myers' Iliad.

13. Recognition of adolescent power, etc.: — Iliad, 209, 299, 411; Odyssey, 10, 12, 40, 108, 283, 289, 298, 301, 331, 355, 372–3.
14. Woman's place: — Iliad, 173; Odyssey, 12, 89, 91, 338.
15. Observation of nature,— *passim*.

CLASSIFICATION OF VARIOUS ITEMS GATHERED FROM HESIOD: —

16. Family life and relations,— cruder; picture less charming than that of Homer. But he deals with a different part of society.
17. Political organization has evidently advanced. See reference to courts: — Works and Days, 37.
18. Religion: — Body of knowledge as to origins; evolution of gods. Classification of gods. Body of religious precepts. Intimate contact of gods with men,— gods watch, conduct, help, instruct. Spirits. Ethical life rudimentary in some particulars, well developed in others. Woman placed below man in character. Works and Days, 250–55, 280–5, 325–35, 340 ff., 375, 460, 705, 730. See also Theogony.
19. Body of knowledge formed of condensed experience of the race in agriculture, often apothegmatic in nature. Astronomical facts as to times and seasons for agricultural operations. Nature signs for guidance. Calendar-lore and superstitions. Such knowledge naturally passed on by oral tradition. Works and Days, 360–70, 380 ff., 450, 460 ff., 775.
20. Body of knowledge or beliefs as to evolution of the human race. Men of the golden race became genii, constantly present with men and guarding them.
21. Industrial life simple. Agriculture emphasized.
22. Education domestic and through environment. Teaching power of poets like Hesiod. Rivalry, necessity of labor, effort for attainment of the good are educational stimuli. Works and Days, 22, 40, 185, 225–35, 285–90, 300–315.
23. "Badness, look you, you may choose in a heap; level is the path and right near it dwells. But before virtue the immortal gods have set exertion, and long and steep and rugged at the first is the way to it, but when one shall have reached the summit, then truly it is easy, difficult though it be before." Works and Days, 285–90.

IV

SECONDARY EDUCATION IN GREECE — EARLY HISTORIC PERIOD [1]

Letters the dividing point between primitive and historic education.— The invention of letters marks the dividing point between primitive education and early historic education in Greece. In primitive times letters were not thought of. The little community was a compact and exclusive whole, intensely devoted to maintaining and advancing its life and excluding from it all other communities. Communication was of the simplest form. Written symbols beyond the rudest signs, such as notches, straight lines, and spirals, were unknown. Society did not feel the need of them. The germs of literature, however, were present in the different forms of folk-lore, particularly ballad forms. This folk-lore was easily appreciated, and it was readily transmitted by oral tradition.

As society became more fully organized and the need of communication became more pressing and its forms more varied, written symbols were developed. Crude at first, so that no school was thought of or needed for teaching them, they grew in value, detail, and expressive power [2] till a real alphabet was developed and true phonetic writing and reading were possible. Ballads and hero tales were no longer entrusted to memory, oral tradition, as during the period when Homeric and Hesiodic literature was forming. Books were made, especially books of rhythmic tales, and inscriptions and

[1] In this study Athenian education is taken as the type. Spartan education is very interesting from more than one point of view, but it concerns us little in the direct traditions of the secondary school.

[2] Explorations among the Cretan ruins have shown that long before the Homeric period a "system of writing, syllabic and perhaps partly alphabetic," existed, and this discovery has placed the introduction of writing in Greece seven centuries earlier than has commonly been believed.

other forms of writing were common. By this time the need of having all members of the community familiar with the phonetic elements of language and able to read called for special instruction in such things. Meantime number symbols took the place of the rude devices noted in the previous chapter, though the first symbols were very cumbrous; these too and the needs to which they ministered suggested formal instruction.

The letter school.— As has been shown the only formal arrangements for education in early times, whether in the heroic period, or in the ruder times of later Greek life on the mainland, seem to have had reference only to the adolescent. His was the first school, and we have seen that it was clearly defined in the most primitive civilization. But there came a time, before we get far into the historic period, when the necessity for "letters" and written speech for practical purposes became so pressing that a new form of instruction and a new school were developed, the school of "letters," the latter term being then interpreted broadly enough to include much more than it does now. The seemingly simple and elementary instruction here involved was naturally applied to childhood. Thus formal elementary education began,— first at the home, and later, as society became more specialized, at some common meeting place,— called significantly σχολή in Greece, and in Rome *ludus* and *schola*. It came in Greece in the seventh century, in Rome, three centuries later.[3] Progress in "letters" was gradual, toward more and more complex combinations of symbols and of thought beneath the symbolism. Progress in the mastery of letters had a corresponding evolution.

Characteristics of the Greeks.— As we have now reached the beginning of organized education in Greece it is well to

[3] Herodotus, VI: *27*; Thucydides, VII: 29. See also the Thurian law as to public education, 6th to 7th century, Diodorus, XII: 12, and Solon's law as to compulsory education, Plato, Crito 50, D; Plutarch, Themistocles, 10, speaks of a vote to hire teachers. Conf. Ælian, VII: 15.

Aristophanes describes an interesting school scene,— evidently a typical one. He tells of Athenian children, in order, distributed according to their district, marching in serried ranks through rain, snow, or scorching heat to school; and De Coulanges (*op. cit.* 295), remarks that "The children seem already to understand that they are performing a public duty."

glance at the peculiar characteristics of the people which distinguish them from all other peoples. Only in this way can we appreciate their provisions for education. We began to note these characteristics in treating of the Homeric period. Some of them come to view only in the later Greek period, but we may summarize them once for all here and apply them partially or in full, as the case demands.[4]

Fundamental ideas and characteristics of the Greeks: —

1. Sophrosyne (temperantia).— Arete (virtus).— Courage, love of country (spontaneous, but not deep).— Eukosimia (grace, esthetic expression in all lines) — Proportion,— harmonious development of physical and mental elements.

2. Innate love of freedom and independence (free personality). Self assertion.— Development for individual primary, for state secondary.— Authority of the state from the individual.— Individuality through the state and in the state is the composite way of stating it.

3. Versatility, many-sided activity.

4. Power to generalize, idealize, universalize, and power to make ideals concrete and objective.— Kept going out from simple life and ideas of truth and proportion to a larger life, and thus heightened capacity and power.— Intense intellectuality and fearlessness in taking up and prosecuting to the end any subject or investigation, regardless of issues.— Love of knowledge for its own sake, unfettered by form, religion, or caste.— Creative imagination gave form to narrow realities of life.

5. Religion not abstract. Gods idealized personalities (friendly). — Nature and life full of deity.— A joyful religion of freedom and spontaneity.— Religious concepts, both the simplest and deepest, open to all, not limited, as in Orient.— Saw bright and cheerful side.— Moulded all in esthetic lines.

6. Viewed a virtuous life as a beautiful and happy one, in harmony with self and external relations.— No deep religious sense or reverence. No high conception of abstract duty. No strong and steady devotion to principle. Not conspicuous for solidity.— Not highly developed in truthfulness and other social virtues.— Subtle and genial.— In general, showed broad and varied human sympathy.

7. No genius for order and system.

8. No strong family life; woman subordinate and inferior.

9. Education instinctive product of life and people,— spontaneous.

[4] This list is made up from various studies of the Greek people made by various students of Greek life. Various angles of view help us to get broader and more suggestive ideas as to the Greek people and their qualities.

— Also outgrowth of theory and discussion. It was, at its foundation, a realization of capacity. Central idea was to produce a balance in the factors of life. Unity, comprehensiveness, proportion, aimfulness are conspicuous.— Little system or organization.

Political and social environment of Greek youth.— Keeping these characteristics in mind as a guide in interpreting institutions we may now consider in detail the scheme of education provided in the period under review. And first as to the ideal. That which began to emerge in Homeric Greece has grown stronger. The state is still supreme, but the individual has grown. In place of a single ruler and his advisory council, or an oligarchy of rulers, we find a democracy of rulers, but one in which the individual is still dominated by the state. The individual is free to develop himself, to initiate, to mould, though always in the line of characteristic Greek thought. Individual development through and for the state, or, in other words, the realization of capacity for civic life, perhaps expresses the ideal of education as nearly as we can compass it. Here we have combined the two forces, the enveloping state and the developing individual. It is not the first time that personality has counted; Egypt had seen much of it; but it is the first time it has had such ideal conditions.

Aim of education under Greek conditions.— The aim in education in this early Greek period was not merely to train for civic life, but to train in accord with the spirit which has been indicated above. The ideal could be carried out only by the training of a well-balanced individual for state service. Body and mind were to be educated as a unit. The esthetic principle of proportion dominated educational thought, as it dominated Greek thought generally.

Characteristic elements in Greek education. The curriculum.— In connection with the subject matter of school training the Greeks had a fondness for a terminology of a very inclusive nature that has now given place to a narrow and prosaic one. From the earliest times they were devoted to what they called mousike.[5] In trying to interpret this term

[5] Plato, Protagoras, 326; Republic, 376 ff., 404, 522; Aristotle, Politics, VIII, 3:7–12. See also chapter on Plato's and Aristotle's Secondary Schools, Chapter VI.

we must divest ourselves of all preconceived notions of the word,— forget its association with our word, music, or rather forget the narrow signification of the word with us. It meant that which the Muses blessed and applied to various modes of expression in human life,— whether mental or physical. It included rhythm of body as well as rhythm of language. It applied again to all those symbols and forms that give us access to man's spoken or written thoughts, and finally it applied to that which is suggested by the quantitative relations of society (and which is itself the basis of rhythm),— number. Mousike is seen in the primitive scheme, but it became more organized, more conscious of its educational functions, as time went on. To the simple forms of life to which alone the early boy reacted (if we except the germs of literature that were referred to in earlier pages) were gradually added the higher forms of art,— more elaborate esthetic development in literature, color, and form. Physical education was correspondingly organized, so that the boy took up at the palæstra [6] a regular course of exercises calculated to make him a perfect physical boy, including grace of carriage as well as symmetry of body. The whole curriculum may thus be summed up by the two expressions *mousike* and *physical training*.[7] The course evidently had a double aim, first to give the boy practical command of the facts of life; second to cultivate a keen sense of esthetic values expressed in grace of body and grace of mind. All may be comprehended in the words *growing citizen worthy of the Greek state*.[8] Around all this and permeating it was that education which the boy was getting by natural means in the life of the community, an education both practical and intellectual, the only education of the earlier times. This was giving him increased mastery of folklore and of the form, spirit, and special characteristics of com-

[6] This was a private building or enclosure. Secondary school boys were trained in a public building.

[7] Davidson, Aristotle, 72 ff. Lucian in his Anarcharsis gives a more detailed classification. Drawing was sometimes added, at least in later times,— Aristotle, Pol., VIII, 3. As to curriculum, compare do. VIII, 3: 7–12. For matters of general interest as to the curriculum see Appendix 1, 2.

[8] Davidson, *op. cit.*, 36.

munity life. Esthetic forms here had a very natural and effective ministry.[9]

But it should be noted that old Greek education had a substantial moral and religious element in it. One can feel the moral element in the choice of material for their simple curriculum, in the motions of the boys in and out of school, in the strong "discipline" of the boy's school life. It was this element particularly to which later writers harked back in their lamentations over the decadence of education. As to religion, it permeated Greek life. The gods, their symbols and their worship, surrounded and influenced early Greek life, not oppressively, but impressively.[10]

Methods in the elementary school.— As to method, reading was taught by the barest synthetical method, writing more concretely, but still synthetically. Arithmetic was presented more pedagogically, by objects, finger symbols, and the abacus, though the notation and symbols were so cumbrous that only the most elementary knowledge was practicable, all that was necessary in the earlier and simpler times. The practice books in the formal language work were Greece's great epics, which admirably met children's interests.

It will be seen that this curriculum represented a natural development. It met the needs and demands of the time in an effective way. This is true in a sense of method,— even the part of it that applied to letters. The forms of language must be learned, and they took the most obvious method of learning them. This does not mean that the method was pedagogical; it was not, though it had this pedagogical feature, that it gave the child familiarity with a great literature that appealed to his interest, before the forms were learned. It was the product of an unreflecting and unscientific age, before men became conscious of a relation between child-interest, child development, and method. This came out later in the work of some of the educational philosophers; but the formal method had become so fixed that it probably never yielded to the pedagogical insight and suggestions of reformers.

[9] Conf. Aristophanes, Clouds (Monroe's Source Book, 82 ff); Plutarch, Lycurgus; Thucydides, Paricles' Funeral Oration. See Monroe, *op. cit.*, 15 ff.

[10] Monroe, *op. cit.*, 82 ff; Appendix 2.

Results.— All this, as has been indicated, was the work of early school years. It completed the form-work, and gave the keys to the recorded inheritances of the race and power to record current additions to thought and achievement.

Education for boys only.— Naturally, in accordance with Greek characteristics, even this elementary course was for boys only. Girls were restricted to domestic life, and an extremely narrow domestic life at that. Greece limited herself here seriously and with serious consequences, but she took special heed of her boys and made education compulsory for them.[11]

So much for primary education. As shown elsewhere it is helpful, if not absolutely necessary, to make brief references to this phase of training; for to understand the real significance of secondary education it is desirable to see something of its setting and relations.

Secondary education.— The adolescent boy's education became correspondingly organized.[12] But formal education had been completed in the elementary period; the adolescent had none of it. He doubtless continued his interest in the literary products of his race, whether ballad-song, hero-tale, or epic, and he could recite on occasion. Music still occupied him, but now in a more technical sense. For the most part, however, he gave himself to physical exercises and to training for civic duties. There were special arrangements for his training, but aside from these there was ever present the potent training of a Greek environment.

Method.— The nature and method of this course of training are striking. The work was more sustained and more serious than that of previous years. But there was freedom from irksome restraint, though the youth was constantly impressed by his relations to a closely organized community that surrounded him, watched his movements, and guided him with definite purpose according to a carefully prescribed general plan. As formal education of the school had passed with the elementary period, he learned by seeing the things them-

[11] Appendix 1, 2; Monroe, *op. cit.*, 82.

[12] Plato, Protag., 326; Davidson, *op. cit.*, 85–90; Laurie, Pre-Christian Educ., 276, 287; Mahaffy, Old Greek Educ.

selves in full operation, by coming into close touch with them, and later by cooperation and service in them, winning the natural penalties and rewards which attend such service. He learned the laws, but he gained a finer knowledge of them by observation and doing. Civic duties were learned by social contact and participation, and military duties were mastered by a similar method applied to that field of activity. This observation and practice, however, were not optional, but compulsory. The great national games, bringing together delegations from various sections that were not ordinarily in close touch with one another, brought a new kind of participation, wider observation, and broader social contact.

When we come to physical education we find an advanced course carried out strictly and systematically in a special public building under a special teacher supplied by the state. It is probable that this work also was compulsory; it was so in early days. The games again offered stimulus to physical exercise, but only for a very few, so far as actual participation went.

General estimate.— Adolescent education as a whole was thus largely through observation and doing. The method was concrete and suggestive. The aim was to train a well-balanced individual for service in the state.

Special ceremonies characteristic of the education of the adolescent.— But there was another factor in method and another course in the curriculum. The boy's induction into citizenship was marked by special forms, his initiation ceremonies.[13] We found that in early times the characteristic part of the adolescent's training took place in this connection and gave him mastery of the most important parts of the knowledge-accumulations of his tribe. They occupied an extended and absorbing period. The ceremonies had now been reduced in detail, but they still must have been a not unimportant means of impressing the youth who were thus initiated. The momentum gained in the ages of their greater prominence still gave them meaning and force.[14] They served to clinch the adolescent's training and helped to make him a true Greek.

[13] Davidson, *op. cit.*, 89, 90; Mahaffy, *op. cit.*; Appendix 3.

[14] "On proof of his birth status and his fulfilment of moral and physical conditions prescribed by statute or common law, he was

General characteristics of Greek education.— All in all Greek training was training for power, for capacity, and not for mere acquisition.[15] It must be remembered, however, that the individual was still distinctly subordinate, especially in the earlier part of the period with which we are dealing. Thus his range was as yet narrow. It was limited by the old forms and bounds that we have found in ancient society (see Chapter I). But he had begun to have a broader outlook. Subordination was not that of the old times. The individual was gaining a new position.

Summary.— The adolescent's education may be summed up in the following outline, and may be compared with that of the elementary period that is given beside it.

EDUCATION FOR EARLY PERIOD, BEFORE THE FIFTH CENTURY.

Aims: — Development of capacity of the individual and preparation for civic duty in accordance with Greek characteristics. Harmony and balance; education of body and mind as a unit. A well-balanced individual for state service.

Curriculum.

ELEMENTARY		SECONDARY
Reading, writing and simple number work.	Music	A. Further familiarity with folk-lore and with great literature of the nation,— through continued reading, recitation, etc. Music,— more definite study.
Learning of folk-lore.		
Music,— simple, strong songs with lyre accompaniment.		Religious training,— through observation and participation in choruses and festivals.
Physical exercise (in games and palæstra). Aimed at rhythm and grace and soundness of body,— physical excellence worthy of Greek citizenship.		Civics—Observation of civic and social life of community. Laws learned and practiced.

registered in his Deme, his hair was cut, he assumed the characteristic citizen dress, was presented to the Athenian people in public assembly, was duly armed with typical Greek weapons, and at the altar of the canonized daughter of autochthonic Cecrops (a Totem father) took the time-honored oath binding him to the support of his country. Social as well as religious functions attended these initiation ceremonies which marked a great epoch in the boy's life." See Appendix 3.

[15] Davidson, *op cit.*, 72.

Mastery of form, spirit, and special characteristics of community life.

Gymnastics: — More serious and sustained course of physical training than that given in palæstra. This course given in gymnasium. Also games.

B. Admission as amateur citizen with religious and social ceremonies,— initiation ceremonies. After this, one year of serious military training (comparatively mild in Greece); participation in festivals; one year of actual service on frontier of Attica.

C. Full citizenship. Participation in all civic functions. Trained by state. This was the graduate course of Athens.

Method: — 1. In *elementary education.*— *Reading,*— synthetic method.— *Writing,*— imitation, tracing. The pupil made his own reading book; hence reading and writing were correlated. *Arithmetic,*— sand, counters, abacus.— *Geography* and *History,*— through correlation.— *Religion* and *Morals,*— through correlation, and through observation of and participation in the life of the community, in an elementary way, etc.— Gymnastics,— under trainer.

Imparting, memorizing, imitation were prominent.— (Charts, pictures, etc., for teaching probably came later.)

2. In *secondary education* methods were generally concrete and suggestive. Observation, participation, service were prominent. Some memory work (learning the laws).— Emulation used as an incentive.— Formal training in Gymnasium under scientific training-master.— Youth was generally under careful surveillance. (Later, young men had a civic organization in imitation of state, giving practical training.)

Notice in secondary education intense physical training, absence of formal training, freedom from irksome restraint, concrete and suggestive work, social contact and social participation, outward look.

Initiation ceremonies ended one stage of training and introduced another. They impressed certain facts of the past and future. A characteristic educational force.

Greek secondary education peculiarly adapted to adolescence.— It must be acknowledged that this scheme, both

subject matter and method, was, in many ways, admirably adapted to accomplish the purpose in mind. This will appear more pointedly from a study of adolescent characteristics,[16] which differ, not merely in degree, but in quality, from those of other periods of life.

If we examine the secondary course as developed by the Greeks in the light of these characteristics it is plain that it was adapted to the boy of secondary age in some noticeable features.

1. It gave opportunity for wider and stronger observation.

2. It gave expression to adolescent nature and activity in many lines. Adolescent physical life that was rampant had an outlet in healthful physical exercise and occupation. Civic instincts related themselves to the community in vital ways. Esthetic stimulus and patriotic employment gave opportunity for natural development of the emotional life of the adolescent. Stimulating ideals were all about him, and were handed down from the past in an attractive literature; they could readily objectify themselves in plans by which the youth related himself to the community. Moral life again had a field for spontaneous growth, under natural and sensible conditions, but under definite guidance.

3. The restraint of form and of careful regulation and surveillance was there, but mingled with a certain amount of individual freedom and initiative. Where proportion is duly regarded this makes the best combination for steadying adolescent natures.

4. The tendency was to encourage outlook, rather than excessive introspection.[17] The facts and meaning of human relations were at hand and could be realized in a healthful way,— by interested observation and participation.

5. Formal training, such as appears in a formal study of language, was relegated to the elementary period which takes kindly to learning mere form.

By a kind of intuition the Greeks devised a scheme of adoles-

[16] The author has summarized adolescent characteristics gathered from many sources in the Journal of Pedagogy, Vol. 17, pp. 114 ff. (1904–5).

[17] Davidson, *op. cit.*, 85–88; Laurie, *op. cit.*, 276, 287; Mahaffy, *op. cit.*

cent education that was, in a rather remarkable degree, suited to the secondary school age. A natural development along the lines it suggested would have perfected the scheme. But tendencies were at work that served to transform the early secondary education into a formal scheme of training, and to emphasize formal and unpedagogical methods. The science of education lagged behind other sciences. Other matters were waiting for development, and attention was given in their direction intensively. It is only in the last few years that a scientific study of the individual and of the relations of the human and the culture subject have begun to make us sensitive to adolescent needs. We are approaching consciously and scientifically, though very slowly, the point that the Greeks, and, before them, primitive peoples, reached by intuition. When we actually reach it we shall find that the early secondary course contained the germs of what we are seeking. We shall be able to avoid their inconsistencies and fulfil their prophecies.

APPENDIX

1. **Elements of Greek education.**— Plato, Protagoras, speaks of early education at home and in the school and goes on to say, "When the boy has learned his letters and is beginning to understand what is written, as before he understood only what was spoken, they put into his hands the works of great poets, which he reads at school; in these are contained many admonitions and many tales and praises, and encomia of ancient famous men, which he is required to learn by heart, in order that he may imitate or emulate these men and desire to become like them. Then again the teachers of the lyre take similar care that their young disciple is temperate and gets into no mischief; and when they have taught him the use of the lyre, they introduce him to the poems of other great poets, who are lyric poets; and these they set to music, and make their harmonies and rhythms quite familiar to the children, in order that they may learn to be more gentle and harmonious and rhythmical, and so more fitted for speech and action; for the life of man in every part has need of harmony and rhythm. Then they send them to the master of gymnastic, in order that their bodies may better minister to the virtuous mind, and that the weakness of their bodies may not force them to play the coward in war or on any other occasion. This is what is done by those who have the means, and those who have the means are the rich; their children begin education soonest and leave off latest. When they have done with masters, the state again compels them to

learn the laws, and live after the pattern which they furnish, and not after their own fancies; and just as in learning to write the writing-master first draws lines with a style for the use of the young beginner, and gives him the tablet and makes him follow the lines, so the city draws the laws, which were the invention of good lawgivers who were of old time; these are given to the young man in order to guide him in his conduct whether as ruler or ruled; and he who transgresses them is to be corrected, or, in other words called to account."— Protagoras, 326.

2. **The old and the new.**— Aristophanes in his Clouds takes up the matter of education, contrasting the old and the new. The whole picture is of course one of irony, and though the description of the old is a serious one, we may perhaps question whether there is not a temptation to exaggerate and color. Still the account is a useful one to use in connection with other material. Here is a brief summary of certain parts of the passage, showing the nature of the old education: — The boy was to be quiet. Boys from the same quarter marched in good order to the school of the harp-master naked and in a body, even if it snowed "as thick as meal."

The master taught the old substantial music, not present quavers. Boys were to maintain a virile, modest, respectful attitude during instruction, and generally. Bodies were not anointed below the navel, so that they "wore the appearance of blooming health." Strict discipline was customary.

3. **Initiation.**— At eighteen, if he fulfilled requirements, moral and physical, he was entered as a regular member of his Deme. After this he was introduced to the whole people at a public assembly, was armed, and took the oath. His induction into citizenship was attended with religious ceremonies that remind us of, and, with other attendant ceremonies, are probably a relic of, prehistoric initiation ceremonies. He now served two years as soldier, the first year drilling near Athens, learning the art, and taking part in public festivals, the second year undertaking more serious military service. It was evidently a "hardening process," while it afforded an excellent opportunity for becoming perfectly acquainted with the topography of the country. He may also have taken part in citizen duties in the city, in assembly and courts. At the close of the two years, if he stood a final test, he became a full-fledged citizen. See Davidson, Arist., 89, 90, and Mahaffy, Old Greek Educ.

V

SECONDARY EDUCATION IN GREECE — LATER HISTORIC PERIOD

Contrasts between the periods of Greek development.— Greek life during the period discussed in the last chapter represented an immense advance over primitive life. The city-state had been developed and had already existed for an indefinite period, and culture forms and culture material had advanced conspicuously. But life was still simple. The social and political unit was narrow, confined, self-centered. While individual freedom had made some gains, it had little breadth or scope, to such an extent was the individual dominated by the state. Thought had certainly been broadened and fined, but those simple, strong primitive ideas that we have noted in other chapters still made themselves felt and retained much of their pristine vigor. The Greeks had not penetrated and analyzed the world without, much less the world within. But a fuller entrance into these two worlds was at hand. Psychological development and historical development, reacting on one another,[1] brought a new epoch. The later Greek period was characterized by wider contact with the external world and the world of thought, and by consonant changes in men's relations to these objective and subjective worlds.[2] Athens now became self conscious. As a natural corollary of all this the individual assumed greater importance,— even became dominant.

Changes in the later Greek period.— In connection with this evolution four points need special notice here.

1. Greek education had strikingly increased in recent centuries. Books multiplied and became the natural repositories

[1] It would be interesting to follow this out in detail and go further into the evolution of a new Greece, but it would not be germane to our main purpose. The general statement as to causes must suffice here.

[2] Appendix 1; Monroe, History of Education; Mahaffy, *op. cit.*, 84; Kirkpatrick, Amer. Jour. of Educ., 24: 453 ff.

of the most attractive thoughts and experiences of the race and the most intense thinking of the time. They thus, in large measure, took the place of oral tradition that was characteristic of primitive times.

2. Language had developed in literary, artistic, and scientific lines, becoming more expressive, complex, and philosophical. Hence men turned more to the world of books, less to the world of things. The change brought with it two new educational agencies, one found in contact with and study of books, the other found in the exposition of literature in the free public theatre and at the international literary contests during the celebration of Greek games.

3. Music and art had changed in character. The significance and value of detail were better appreciated. Technique and modes of appeal to sentiment and the emotions began to be studied. A wonderful artistic sense had been developed. The broadening process was fully as marked here as in other directions. A new world had been discovered in art, as in other fields of mental effort,— a subjective world.

4. Physical training received less attention than before; the strict traditional regimen had been relaxed, as related to both the individual and the state.

The underlying causes.— But all these things were but secondary; they were merely phenomena. There were two far more fundamental matters that give us a deeper insight into the times and help us to understand their spirit: —

1. **More scope for the individual.**— The community had ceased to think so fully for the individual and to impose its dictum unalterable upon him. Tribal standards in this sense had passed. There was thus more scope for individual standards. The old unity and compactness of organization had been outgrown. New unities were forming.[3] The reforms that go by the names of Draco, Solon, and Cleisthenes represented one

[3] The new of course required a long development before it could become stable and take hold of the populace sufficiently to produce a solidarity comparable with the old. Meantime social and political life were liable to be ragged and to court temporary disaster. But men did not make the modern mistake of postponing democracy because conditions were not perfect. Democracy is educative. Rightly guided and balanced it grows securely.

side of this change, the external. But there was another and more important side, the psychological. The individual had asserted himself, and social organization had become secure enough to allow him more latitude. The community was thus prepared to advance to something higher than was possible in the old tribal days. To these changing conditions again must be added the wider and more complex national relations that called for new power to direct and utilize them.

The Greek citizen must be prepared to meet these broader relations with the outside world and the opportunities they offered for diplomacy and personal and civic advancement through national and international politics. He must meet also the still greater demands that a new era of thought and individual freedom made upon him. To do this he must have power of independent thought, power to analyze, compare, judge, discuss, power to throw his personality into new premises and syntheses. In a word, he must have dialectic power, if the community and the individual were to rise above the level of the past. It might be often at the expense of individual damage and even destruction, if not steadied by the balance of a just education that it was the business of the state to give. But these are mere accidents for which a great evolutionary movement is not responsible, and for which it does not stay. The dialectic method was a natural and logical growth and a vital condition for working out the genius of the new epoch. Socrates was not so much its discoverer as a typical exponent of what the times produced. Some of his reported discussions represent a drama in which tradition and newly springing independence played leading rôles. This represented the internal side of the change,— the psychological.

These conditions required a new linguistic development, if the Greek citizen of the day was to assert himself and meet the situation to which forces without and within were directing him. He must have power to formulate and express his thought effectively, if the power of dialectic was to have due issue in swaying men's minds. This was a sine qua non for personal advancement.

2. **The individual the center.**— All this naturally modified Greek ideals. In the buoyancy of the new times, and

under the spur of individual freedom, whose very newness excited the adolescent spirit of the nation, the tendency was toward individualism,— not the individual for the state, as formerly, but the individual for himself, and the state also for him. This made the individual the center of culture and education and led him to lay siege to everything that would minister to his power and enjoyment.[4] The ideal was most sensitively balanced and led to evil as easily as to good — more easily, because the ideal was only a partial one. Hence the brilliance and tragedy of later Greek history. From the same conditions also came that other individualism whose summum bonum was cultivated leisure (diagoge), which has given us charming pictures of classical life, though marred by civic inaction and the suggestion of decadence.

Graphic comparison of early and later periods.— Looking at the period as a whole, from about the sixth century to the third, we may make a brief comparative summary of its characteristics as follows:

EARLY PERIOD[5]	LATE PERIOD[5]
1. City state small. Citizens few. An aristocracy.	1. City state larger. Citizenship broader. Intense democracy.
2. Eternal relations simple, narrow; internal relations simple.	2. External relations broader, more complex. Wider contact with other civilizations. Internal relations broader, more complicated. Many-sided life.
3. Thought simple, concrete, objective, outward.	3. Thought more complex, dealing more with details and meanings of things; subjective.

[4] We find here that the new features in social organization and the new element in method beginning to appear in the Homeric epoch, have reached their outermost limit. The new outdid itself and, in a way, developed a virtue into a vice. But this must not obscure the characteristic contributions that Greece made to education,— individual initiative and opportunities for individual development.

[5] The generalizations are made up from many sources,— Mahaffy, *op. et loc. cit.;* Kirkpatrick, *loc. cit.;* Laurie, *op. cit.,* 306 ff.; Monroe, *op. cit.,* 84 ff., 91 ff.; De Coulanges, *op. cit.,* 475 et al.; Aristotle, Pol., VIII, 1 : 3; Plato, Rep., 499, 524, 527–30, 532–3; Appendix 1, 2, 3. See also Botsford and Sihler, Hellenic Civilization.

4. Literature expressed great objective facts, in simple narrative, or in simple song.	4. Literature more artistic, more philosophical, dealing more with inner meanings and relations.
5. Art also more or less objective, representing generalized ideas in concrete form. Appealed by wholes.	5. In art more attention to detail and effect of detail; more attention to expression of emotions.
6. Norms external, in tradition.	6. Norms within, reasoned for self; transferred to others through special method, not by the fiat of tradition alone.
7. State supreme.	7. Individual supreme.

Summary of the demands of the new period.— Altogether then the new period shows a new attitude toward inheritances, more individuality, more personal responsibility, greater freedom of thought.[6] New relations, new interests, new ambitions were pressing the young Athenian forward. With these changes had come a richer growth of acquisition in all directions. New studies and new methods also demanded admission to the educational program. Leadership, which might be the aim of any true Athenian, depended upon the effective use of words,— not the old natural language power, but a studied skill. The orator became an ideal. Audiences, whether of the spoken or of the written word, were more intelligent, more critical, more exacting, and acted as an external pressure to supplement the inner stimulus that came to the individual from his higher mental development. Thus larger intellectual attainment, more resources for instructing and illustrating, wider and more technical language power were needed.

A new curriculum and a new method.— As to the schools, a broad and rigid course in linguistics, involving a knowledge of the whole realm of literature, was the natural means of gaining the desired end,— training in language such as had never existed before. The sciences of grammar and rhetoric date from this time. The two-fold *musice* that had formed a single unity in the old curriculum was divided. Each of its parts had become so large that it formed a distinct department in educa-

[6] See De Coulanges' Ancient City (one of the most striking and appreciative studies yet made), 470 ff.

tion. "Letters" and "music" were henceforth distinct in at least one great series of schools.

Dialectic.— But ideas must come before expression. For expression a study of dialectics was needed to give it point and effect. The new linguistic training might afford opportunity for much of this, but it must be supplemented by the other study that partook of the nature of psychology and philosophy and provided both matter and method.

A new curriculum had thus come into being, consisting of the old studies developed and broadened and the new studies rising out of the new conditions. Some one has said that the early Greek curriculum produced habits, but that there was needed a further education on the intellectual side to guide, and free habits. The best of the new could do this. The whole of the new was not found in any one place, and it was found in few schools, but it was a part of Greek life and was calculated to give a more extensive and intensive intellectual development and to produce technical skill.

New teachers.— But new courses and new methods required new teachers. These were the sophists. Their appearance was not accidental nor sudden. They grew naturally out of the new times. They offered both wide knowledge of things that were attracting attention, and training in thought, thought method, and expression. Their curriculum, if it could be called such, was a very inclusive and ambitious one, covering the whole range of knowledge. Their aim was to make the individual supreme. As ever, there were two classes of teachers,— those who were thorough and professional, and those who were superficial and unprofessional. The former aimed at a thoroughly trained man and founded their work on principles.[7] The others aimed at immediate individual success, made much of short-cut methods, and by their agnostic attitude tended to upset absolute values and standards and make each man his own norm. They were the proprietors of the "thinking-shops."[8]

[7] As to the two classes of sophists, and sophists generally, see Appendix 1, 2, 3; Davidson, *op. cit.*, 101 ff.; Kirkpatrick, Laurie, Mahaffy, *op. et loc. cit.*; Monroe, *op. cit.*, 68, 85, 95 ff.; Plato, Rep., 493, 496, 497.

[8] "I will go myself to the thinking-shop and get taught,"— Monroe, *op. cit.*, 68.

Two aims.— We can make our ideas of the new education clearer and more definite by analyzing it and distinguishing its aims. In the course of our discussion two ideals have been prominent,– 1, rhetorical supremacy, command of winning forms; 2, intellectual supremacy, power to discuss reasons and to initiate. Correlatively there were two great objects in life,– 1, influence in public life, power to impress and express, in which self was the center; 2, cultured leisure, in which again self was the center. To be just we should perhaps discover a third object that would combine the other two. These objects defined educational aims.

Two series of schools, 1. Schools of Rhetoric.— It was thus natural that the Sophist schools should split into two great series:– 1. Schools of Rhetoric, the best type of which is found in the school of Isocrates.[9] This great teacher built on a good secondary course of training in grammar and literature, taken before entering his school. He believed that higher education should be *"practical, rational, comprehensive,"* and he emphasized training in three lines,— defining objects, adapting means, and developing power through effort. These schools of rhetoric, with their presuppositions, took the most characteristic parts of the sophist course, *linguistic studies, general information studies,* and *oratory*. Linguistics were the core of the curriculum.

It must not be supposed, however, from the statement that a rhetorical school built its work upon a course of secondary training, that nothing inside the school was of a secondary nature. It must have been true that instruction in at least some of these schools was partly, and probably largely, of a secondary nature, just as a large part of the early university course in the Middle Ages was of this character and was applied to boys in their early 'teens.

Method.— Method in these schools was new in some of its elements. It probably still included the traditional principles of imparting information and memorizing; but in addition there was now built up an elaborate system of language training, including imitation, practice, and drill, with abundant

[9] Appendix 4; Laurie, *op. et. loc. cit.;* Monroe, *op. cit.*, 98, 100, 105–108.

rules. Formal language work was elaborated with much detail.[10]

2. **Schools of philosophy.**— In these schools the conspicuous leaders were Socrates, Plato, and Aristotle. Plato and Aristotle tried to outline a state and a system of education that would unite individual and community interests.[11] Their work as a whole was opposed to the formal work of the other sophists. It emphasized the development of power rather than mere communication and class-room mechanics, the intellect rather than memory, device, and formal practice. Here were developed those studies and methods that may be characterized as philosophical and scientific. They applied to the acquisition of knowledge of both the outer and the inner world.

It was in connection with this class of schools particularly, though not exclusively, that one of the characteristic feelings of the Greek race came into the ideals of education. The true Greek had a very keen idea as to what accorded with Greek dignity. Certain things were "liberal," worthy of a freeman; other things were "illiberal," and to be avoided. Anything that was extreme or of a mercenary character was illiberal. The mean in the non-commercial pursuits and those that involved higher intellectuality was a just object of effort. These ideas colored Greek education and were especially prominent in Plato and Aristotle.[12]

Method.— Method here was decidedly less formal than in the first series of schools and was better, but not perfectly, adapted to adolescent interests. It involved thought work (dialectic), active participation of both pupil and teacher, familiar converse, lectures. Method thus became more pedagogical.

If we should attempt to specify the feature of Greek educa-

[10] Conf. Plato, Protag., 326.
If we should consider method more in detail and in its wider signification, as it showed itself in later Greek education, we might imagine we had reached modern days. Prize contests, examinations, and various student customs suggest that it is difficult for us to devise anything new as to externals.

[11] Monroe, Lectures on the History of Education.

[12] Aristotle, Pol.; Plato, Rep.; Conf. Cicero, De Of., I: 42.

tion that was most significant for the future we should most appropriately single out that element of method, or form of method, that is called dialectic. It has been characterized generally from the point of view of results. It is better defined as a process. To describe it as the questioning method is very superficial. Dialectic involved, first, development of the individual as opposed to mass teaching. In the second place, it required participation on the part of the pupil. In the third place, and most significantly, it led to investigation of facts and problems by healthful and stimulating inductive methods till the ultimate truth was reached. Speaking generally it was of course all a questioning process, but of a very comprehensive nature. It was systematic, scientific, thought-stimulating. It involved rigid analysis as a basis for new and sounder synthesis. In this way it exercised all the powers and brought real development, both from the point of view of the individual and from that of the subject studied. For the first time then the old process of rote-learning had been seriously invaded. While the ancient method was destined to be used for some purposes and to have large influence in some cases and in some periods, the new method was to have increasing influence till it occupied the field.[13]

Differentiation in curricula.— At first secondary and higher education were perhaps not very distinct. It may all be designated as higher education. But in time there probably came a differentiation, so that the secondary curriculum may be regarded as approximating the following form:[14]

[13] The method may be described a little more in detail as follows: — It is proposed to discover the truth in a certain direction. At the outset a question is raised as to the first basal fact from which we may proceed toward the end in view. This may be reached directly, or indirectly by first removing a false assumption or opinion. Then the second fact that will serve the main purpose is discovered by a similar process of investigation. And so we proceed by a process of investigation, elimination, suggestion, construction till the final result is reached, which represents in a sense the summation of all the partial results attained along the way. Dialectic is the parent of all objective methods, whether characterized as inductive, developmental, or laboratory.

[14] Aristotle, Pol., VIII, 3:7–12; Plato, Rep., 404, 424, 427–30, 432–3; Laurie, *op. cit.*, 306 ff.; Mahaffy, *op. cit.*, 53 ff., 57 ff., 76, 78 ff.; Kirkpatrick, in Amer. Jour. of Educ., 24:453 ff. It should be borne in mind that different schools and classes of schools probably made special selections and gave different emphases.

A. Linguistics,— grammar, literature, elementary rhetoric.
B. Science,— arithmetic, geometry, astronomy, geography. Elementary, uncorrelated, informational work. In later adolescence there probably came more systematic science and
C. The introduction to philosophy, dialectics.
D. Music. More emotional. More finesse than formerly.
E. Instruction through theatre and games.
F. Physical training, changed in form and aims. Less purposeful and strenuous. Proportion between bodily and mental education broken. Man and citizen separated.

Method: — In *linguistics* the so-called classical method, formal, full of "exercises" and drills. The study of *elementary science* was correlated with that of linguistics. It was accidental. (The study of advanced science and philosophy in later adolescence was conducted by inductive and dialectic methods.)

Greek contributions to education.— Formal schools were now established for both the elementary and the secondary period. The formal school of books for adolescents took the place of the practical school of observation and spontaneous suggestive life. With distinct loss there was, however, distinct gain. The intellectual field was opening. On the curriculum side certain culture subjects were developed that eventually, if we add Alexandrine influence and the Roman genius for grammar, were to grow into the "seven liberal arts," — the "trivium" and the "quadrivium." In the realm of method we find that the process of education had become more developmental.

Problems for the new era.— It remained for coming centuries to regulate education in the new field and to make method more pedagogical and healthful. It remained also to enlarge and define aims and to direct means definitely to their fulfilment.[15] For with this influx of new subjects and new thoughts it was natural that aims should be imperfect and means inadequate, and that views as to ends and aims should be unsettled.[16] Greek education, however, had inherited and developed certain principles and forms, and above all, a certain spirit, and these had a long rule,[17] reaching on into the new era.

[15] Appendix; Laurie, *op. cit.*, 312 ff.
[16] Appendix; Aristotle, Pol., VIII; 2, 3; Plato, Rep., 404.
[17] Laurie, *op. cit.*, 311; Aristotle, *op. cit.*, VIII; 3; Plato, Rep., 376 ff., 522.

APPENDIX

1. **The sophists.**— Speaking of the change in the strict limits of early ideas and organization and the evolution of new ideals, De Coulanges (in The Ancient City, pp. 474 ff.) says: —"The sophists came afterwards (after Pythagoras and Anaxagoras), and exercised more influence than these two great minds. They were men eager to combat old errors. In the struggle which they entered against whatever belonged to the past, they did not spare the institutions of the city more than they spared religious prejudices. They boldly examined and discussed the laws which still reigned in the state and in the family. They went from city to city, proclaiming new principles, teaching, not precisely indifference to the just and the unjust, but a new justice, less narrow, less exclusive than the old, more humane, more rational, and freed from the formulas of preceding ages. This was a hardy enterprise, which stirred up a tempest of hatred and rancor. They were accused of having neither religion, nor morals, nor patriotism. The truth is that they had not a very well settled doctrine, and thought they had done enough when they had attacked old prejudices. They moved, as Plato says, what before had been immovable. They placed the rule of religious sentiment and that of politics in the human conscience, and not in the customs of ancestors, in immovable tradition. They taught the Greeks that to govern a state it was not enough to appeal to old customs and sacred laws, but that men should be persuaded and their wills should be influenced. For the knowledge of ancient customs they substituted the art of reasoning and speaking,— dialectics and rhetoric. Their adversaries quoted tradition to them, while they, on the other hand, employed eloquence and intellect."

"When reflection had thus been once awakened man no longer wished to believe without giving a reason for his belief, or to be governed without discussing his institutions. The habit of free examination became established in men's homes and in the public squares." Here was the foundation of democracy.

"Socrates, while reproving the abuse which the sophists" (better, certain sophists) "made of the right to doubt, was still of their school. Like them he rejected the empire of tradition and believed that the rules of conduct were graven in the human conscience. He differed from them only in this; he studied conscience religiously, and with a firm desire to find there an obligation to be just and to do good. He ranked truth above custom, and justice above law. He separated morals from religion; before him men never thought of a duty except as a command of the ancient gods. He showed that the principle of duty is in the human mind. In all this, whether he wished it or not, he made war upon the city worship.— The revolution which the sophists commenced, and which Socrates had taken up with more moderation, was not stopped by the death of the old man. Greek

society was enfranchised more and more, daily, from the empire of old beliefs and old institutions."

(These remarks are exceedingly interesting, especially when taken in connection with the same author's study of the primitive organization and thought of the Aryans to which his book is devoted. We cannot understand such movements as went on in the later Greek period unless they are considered in the light of a knowledge of primitive culture.)

2. **Some superficial sophist schools.**— Character of sophist schools, — learning an easy accomplishment. "I will go myself to the thinking shop and get taught." Monroe's Source Book, 68. Conf. also Monroe's Source Book, 67 ff.

3. **The making of an orator.**—"What gymnastic is for the body, philosophy is for the mind. In the one as in the other the pupil learns first the technical rudiments, and then how to combine them. The physical and the mental training will alike improve natural powers. But the master of the palæstra cannot make a great athlete, nor the teacher of philosophy a great speaker." To make a great speaker "three things are needed — capacity, training, and practice; capacity, which includes intellect, voice, and nerve, is the chief requisite; practice however can by itself make a good speaker; training is by far the least important of the three; it may be complete and yet may be rendered useless by the absence of a single quality, nerve. Do not suppose that my claims are modest only when I address you, but larger when I speak to my pupils. In an essay, published when I first began to teach, the excessive pretensions of some teachers are expressly blamed." (Other passages suggest that there are two classes of sophists.)

Varied results.—"The success of the sophists is in fact equal to that of any other class of teachers. Some of their pupils become powerful debaters; others become competent teachers; all become more accomplished members of society, better critics, more prudent advisers. And what proves the training to be scientific is that all bear the stamp of a common method. Those who despise such culture assume that practice, which develops every other faculty, is useless to the intellect; that the human mind can educate the instincts of horses and dogs, but cannot train itself; that tame lions and learned bears are possible, but not instructed men." (Isocrates), Monroe's Source Book, 91, 94, 104, 105.

4. **Isocrates and Quintilian.**— The notes as to Isocrates will indicate a connecting link between Greek education and Quintilian. We can trace the decadence from Quintilian down, in Rome, as we do from Isocrates down, in Greece.

VI

SECONDARY EDUCATION IN PLATO AND ARISTOTLE

Position of Greek theorists in education.— Greek theorists in education have influenced educational thought in other centuries and in other countries more than in their own times and country. They probably had little effect upon the secondary schools of Greece. In fact they had little time to do so, before the purely national character and organization of these schools were broken. Historically they represented a reaction against the extreme individualism of the times, which was a disintegrating force. They tried to devise a scheme of education that might counteract evils and conserve true Greek ideals. From the point of view of the science of education they were the first to analyze the educational process, and they gave us our first books on pedagogy, though it would be too much to call them systematic treatises on the subject. The student of the history and philosophy of education finds these personalities and books of unique interest and value. We need to study them briefly here, not simply because they played so prominent a part in the evolution of Greek educational ideas, but particularly because such a study will give us, from a new view-point, an idea of the main tendencies at work in Greece.

Comparison of two ways of studying education.— Plato's analysis of the educational process is philosophic, and he works largely by philosophic instinct. His mysticism, added to, or rather forming the motive force of his enthusiastic speculations, lands him in the transcendental by a natural process through which it is always delightful to follow him. Aristotle's analysis, on the other hand, is scientific, and his logic gives him a fairly consistent and practical scheme of education, as judged by the views of his time. It is interesting also to note that in his analysis he lays the foundation for the science of educational psychology. We are to ascertain here not all the

details of these writers' views as to education but the contributions they made to the pedagogy of the secondary school. The two appendices to this chapter will give detailed accounts of their plans and also present graphic summaries that may be compared with those in previous chapters.

Common basis.— Both Plato and Aristotle built their theories on a civic idea embodied in an ideal state which they made the foundation of their arguments. Plato conceived two states, a transcendental one in his Republic, and a practical one in his Laws. Aristotle, through a double induction, also conceived a practical state, but one inferior to Plato's.[1] Greece always based her education on a civic idea however. We are concerned with this idea here only because it was now first embodied in a definite science of education, as science was conceived in those days. In each case education was to develop intellectual power and balance suited to leadership and general civic duties.

The curriculum purified.— Both writers took the typical Greek curriculum for adolescents,— gymnastic and music (in the wider sense). In the practical working out of this curriculum, however, Plato, in particular, tried to give a larger idea to studies, as has been indicated. Both writers tried to purify studies of their weaker elements and to bring them back to something of the simplicity of earlier days and to the grace and balance that accorded with their own ideas.

Contributions to educational thought and practice. Development emphasized.— But it is in the direction of principles and method that these writers are most distinctive and suggestive. In their model educational states the two writers anticipated the great general principle that education does not implant, but merely develops,[2] which marks the real dividing line between Occidental and Oriental education.

[1] Plato's state in his Laws comes nearer reality than either of the others, but he allows certain artificialities and limitations that still make it a theoretical state. He recognizes however the impracticability and inimitability of his highest ideals and comes as close as he can to real conditions. Notwithstanding his theory his regulations, including those for education, seem to grow out of a practical realization, from his point of view, of state conditions. His laws are suggested by social needs and are calculated to develop an all-around good man.

[2] Stated fully by Plato; implied by Aristotle.

Harmony and proportion.— Again it is noticeable that they emphasized harmony and proportion of life as one of the guiding principles of education. They made a science of that which before had been a matter of instinct. Harmony and proportion however might be merely external. They could not of themselves produce the stability that Greek genius needed. Greek nature must be steadied by a real search for truth, involving the highest exercise of self-activity.

Not facts, but ideas.— Plato with fine feeling seems to have discovered this truth. He made the goal of education philosophic insight that opened up the inner meaning of harmony. Put simply the principle was this, not facts, but the ideas beneath the facts are the objects of quest in education.

The process of attainment. Dialectic.— The process of attainment was in accord with this great end. It was to be genuinely pedagogical, leading from the concrete and objective to the ideal and philosophic. This was the dialectic process described in the last chapter. This aim, this principle, and this process he brought forward and made the distinguishing features of his work. Put into practice they would take the student into a new world and give him real insight, a distinct and very significant gain. They would affect not only method, but the studies of the curriculum. They involved in the best way the freedom of individual development, and so finally brought into education the idea that best characterized the new epoch. At the same time they were a guaranty against the extravagance of individualism that rises when it is separated from its principle, i. e., they supplied a natural corrective calculated to produce poise and balance for counteracting that natural and excessive mobility of Greek nature that led young men to take sudden flights in unbalanced action and made them self-centered, catching at the advantage of the moment.

An intuition for adolescent motif.— In suggesting this principle and aim in the secondary period Plato showed that he appreciated the status of the adolescent. The search for the great thought beneath forms and facts, the quest of the ideal, inspires the adolescent and stimulates his best effort. Inspiration and appeals to the imagination are wonderful motive forces in secondary school method. Plato thus made a much needed

distinction between elementary and secondary method. Elementary education in his scheme contents itself with simple learning processes. Secondary education gets at fundamental meanings, relations, ideals, in the learning.[3] This is one of Plato's most typical contributions to the principles of education. In the formal times that followed it was obscured; it is now coming into prominence again.

Aristotle takes up the aim from a different view-point and brings in the culture (diagoge) idea, thus introducing the thought of a liberal education as a means toward a higher civic life. Apparently also he makes it an end. But it is fair to assume that he is thinking of educating men to a high and most productive use of the leisure that all freemen had in one degree or another.

The teacher.— The teacher is the best part of method. It is natural that thinkers on education should give special attention in this direction. Plato and Aristotle give some of their best suggestions as to teachers. The integrity of their states required special solicitude here. Plato in particular goes into detail concerning the high character and general excellence of his teachers, who are to be possessed of the fundamental ideas and principles on which his scheme of education is built.

Freedom, not education by the rod.— In pursuing their plan of education both writers insist upon giving the pupil not only freedom, but the right stimulus to take hold of and appreciate and appropriate what is needed in the educational process. In their view the old notion of education by the rod is unworthy of free natures. Yet education was to be compulsory. Aristotle, particularly, is very insistent here. This is, however, a matter of school economy, not of school method. There is all the difference in the world between "compulsory education" and education by compulsion.

"Special training and general ability."— One detail as to method, or rather as to the training value of studies, is interesting to note here, in view of the discussions provoked by the theory of education as adjustment. In treating of arithmetic Plato is particular to make it clear that he believes in the special disciplinary value of the study and that he is firmly convinced

[3] Plato, Rep., 537.

that special training gives general ability. This is probably the first formal statement in educational literature of a doctrine that contains a partial truth, but, stated absolutely, is inherently false.

Their chief service to method.— The most important contribution to method that these authors made was their illustration of the meaning and value of dialectic, which they comprehended more fully, and consequently applied further, than their predecessors, whose initial development of this method has been explained in the previous chapter. Thought, experiment, investigation, search for reality, the inspiration of large ideas and relations, all of them keys to adolescent power if shaped rightly so as to fit the adolescent not the adult lock, were idealized. This meant development. This idea of development, as contrasted with imparting knowledge, was the most notable characteristic of their method and put them far beyond their times.

An aristocratic education with limitations.— As to the application of educational privilege, both writers, true to Greek ideas, provide an aristocratic education. But we now for the first time find a reasoned circumscription. Plato develops the more sensible and taking scheme in this particular, making lines of demarcation that are far from rigid. Aristotle is coldly and dogmatically exclusive. Probably both writers, in their attempt to systematize education and to maintain more regular civic principles, are more restrictive than was the practice of the Greeks.

Education of both sexes.— In one way, however, Plato broke away from typical Greek ideas, for in his state of the Laws he provided that girls and boys should have substantially the same education. It would almost seem that he was near the line of universal education.

School administration.— We should note finally that these authors are careful to provide definitely for educational administration. Plato does this rather mystically in his Republic. But the same author in his Laws, and Aristotle in his Politics do it with more definiteness, as a part of state machinery. With "Directors of Education" in the one scheme, and a general "Minister of Education" and a "Minister" for each branch of education, in the other scheme, school

interests, instead of being left to private judgment, as had been the way generally in Greece, are to be fully regulated by the state, and to have something of the impressiveness and watchful care that primitive education had shown.

The contributions of these noted educators to secondary education have to do with its spirit rather than with its form. Altogether it is as a beginning of what was to be, rather than as an indication of what was, that we consider their work here.

Summary.— It is perhaps not unfair to say that Greek education, as we saw it in Chapters IV and V, was rather spontaneous than studied. It was an inspiration, an intuition. The Greeks in practice never organized or systematized anything in education. From all that has been said, and from other details given elsewhere,[4] we find that these theorists supplied what was generally neglected. But times and conditions did not provide an opportunity to make their gains general, and the theorists were too much educational recluses to impress themselves in practical application on any wide scale. In fact their plans as a whole were of such a nature that it was impracticable to put them to the test then or later. We are thus left for concrete results about where we were at the end of Chapter V. Succeeding educators however were inspired by their work and applied many of their ideas in the new systems of later centuries.

APPENDIX I

PLATO'S EDUCATIONAL PLANS, AS GIVEN IN HIS REPUBLIC AND LAWS

1. Plato's scheme of education as given in his Republic, Books ii–vii.

Platonic socialism.— The outlines of Plato's ideal state are well known and need not be given in detail here. Suffice it to say that it is highly socialistic, even to the extent of obliterating the family, and that he organizes it in such a way that classes are distributed according to their characteristics, each following plans of thought and action that he believes accord with the intrinsic fitness of the case;[5] he therefore rests secure in the quiet acquiescence of each class in its destiny, and there is no suspicion of rebellion.

[4] See Appendix.

[5] Class lines however are not absolute. Plato, Rep., 413–14.

General principles of Plato's ideal state.— Those who have the highest ideals and show themselves capable of the highest attainments, being discovered by a natural process of elimination, are to be the rulers. After a kind of probationary period of ruling they attain the state of pure contemplation, where thoughts are filled with pure ideals. They are typical men thinking in types, the great archetypes. Philosophers therefore are to rule; hence the state may be called a philosophic state. The next class, really an offshoot of the same class, is that designated as the "guardians" of the state, the "auxiliaries and allies of the principles of the rulers." Both classes, however, are guardians, though one of them in a higher and broader sense than the other.[6] Now it is this general class or double class of citizens for which alone Plato seems to provide education, and each one is to continue the course according to his talent or affinities, some dropping out at one point, some at another, each to serve the state according to his capacity. The education of other classes comes in a natural way, through apprenticeship and otherwise. We are concerned here then only with some details as to the education of this highest class,— its aims and means.

Distinctive features of his course of education.— Though Plato presupposes a Utopian state based on socialistic principles, he cannot break away from the old Greek course of training. But he idealizes it, — making it lead from the concrete and objective to the ideal and philosophic. Crude forms of things, with which one deals in the schools, with him are to lead to typal forms which one sees only in the world of thought or ideas, as he calls it. His ideal is the conservation of the state through philosophic education inducting students into real ideas, and his state is to be served in lower capacities, requiring more or less education, by those who stop by the way in the long and arduous course toward the philosophic goal.

Great principle. Development.— His great principle is dialectic.[7] Through this he attains his final purpose of living in pure ideas or, as we should say, ideals. In a way dialectic, or dialectic life, is his ideal. This dialectic, which is his talisman, is a straightforward analyzing of anything and everything that meets the student, until the real principle or idea of things is reached. The four stages on the way to this supreme process and power,[8] which represent a kind of psychological analysis of method, are, knowledge of shadows, belief, understanding, and science. His education is to lead pupils to this climax of knowledge. It is not however to put certain qualities or certain knowledge into souls, but to develop latent potentialities; for, he says, "certain professors of education must be mistaken in saying that they can put knowledge into the soul which was not there before, like

[6] Do., 376, 473, 487, 535–36; citations 2, 3, 4 (last pages of Appendix).
[7] Citations 1, 4; Rep., 539.
[8] Do., 533–34.

giving eyes to the blind,— whereas our argument shows that the power is already in the soul."[9]

Aim.— From what has been said it is plain that according to Plato the aim of education, briefly stated, is to train for civic purposes a select body of children through a curriculum that each is to continue according to his talent, the highest degree of this education, attained by a few choice souls, being that which gives philosophic insight and the ruling ability that this produces.

Plato's ideal is thus a civic one. Indeed he makes great effort to throw himself into the breach made by the recession of civic ideals before personal ends and aims.

The curriculum.— The means he suggests for producing his ideal are not new. They are, in the first place, the typical Greek agencies, music and gymnastic.[10] Music as usual includes literature, but very limited in amount and carefully defined in quality.[11] Literature is to be simple and to be freed from all matter that would degrade the soul or jeopardize ideals. Therefore Homer must retire from his position of presiding genius of the schools, and much other material must follow him. Strong melodies, Dorian and Phrygian harmonies, meet his approval, and the lyre, the harp, and the pipe are the instruments of his choice. In literature that is exclusively or chiefly poetical, simple narrative or lofty "imitation" is the rule.

In addition to these simple educational forces he finds that arithmetic, geometry, and astronomy are required for his purpose,[12]— geometry of a simple sort, for he finds solid geometry in a very undeveloped state. Finally in higher education, which is entered only by adults of thirty years, dialectic[13] becomes the sum and substance of the curriculum.

Gradation.— This is a bare summary of the curriculum. As these studies are applied to different ages however, some very interesting distinctions, as well as some very suggestive elements of method, come to view. 1. "Calculation, geometry, and all other elements of instruction which are a preparation for dialectic, should be presented to the mind in childhood" and in the form of amusement. There is to be no compulsion, for "a freeman ought to be a freeman in the acquisition of knowledge."[14] This "childhood" would seem to extend to about the age of sixteen or seventeen, and thus to include much of the period of secondary training. 2. Plato provides then for three years of close application to study, though he is rather vague here, as elsewhere, in the matter of details. In all this early period the sciences are taken up without order. 3. But in late adolescence, when the youth has rounded out a score of years, these subjects are "brought together," so that the youth are "able to see the correlation of them to

[9] Do., 518.
[10] Citations 2, 6–8; Rep., 411.
[11] Citations 7, 9; Rep., 386 ff., 411.
[12] Citations 10–12; Rep., 510, 524–25, 526–28.
[13] The fundamental idea in dialectic was to be applied also to adolescent studies.
[14] Rep., 536–7; Citations, 16.

one another and to true being."[15] Herein lies the most important change which Plato introduced into the secondary curriculum. Students are to go beyond form, beyond the ordinary processes, and to find the great thought beneath,— that which binds them to universal thought, to the world of ideas.[16] This was natural inspiration-ground for youth. The ideal appeals to the adolescent. In the two periods therefore the sciences are taken up in two different ways,— ways so different as to make the subjects themselves seem different. Two different conceptions thus guide the curriculum.

But there is also gradation in method. Beginning with play,[17] which Plato, following primal educational instincts, emphasizes in his scheme, method grows gradually to the dialectic stage.

Secondary education indefinite in Republic.— Plato's educational scheme in his Republic is very general, and can satisfy no one who is looking for an organized scheme of education in which details as to age and study are carefully explained. He refers to definite age in the secondary period but once, and this has already been noted. We may, however, make a simple division that he suggests, earlier education, which is to be "a sort of amusement," thus making it easier to discover the child's "natural bent,"[18] and later education, when subjects are taken up more seriously and shown in their relations. This is significant when we consider the psychologies of the two periods. But as a rule we must look in the Republic only for the larger ideas of education and for a minute discussion of the subject of music. We must look elsewhere for light as to grading and organization. This is found in the Laws.

Davidson, in his Aristotle, leads us to think that Plato maps out his course carefully as to ages and subjects in the Republic. He has evidently combined his suggestions in the Republic and the Laws, which is hardly fair. He even makes Plato more precise than he is. Whatever else the Greek philosopher does, he does not decide finally on any hard and fast lines for our secondary period.

2. PLATO'S SCHEME OF EDUCATION AS GIVEN IN BOOK VII OF HIS LAWS, WITH BRIEF REFERENCE TO OTHER BOOKS

Plato's state is here radically different from that of the Republic, as will be seen by the following outline: —

Outline of State in "The Laws."—[19] No communal principles except "common tables." Private families and property.
Men and women on a par. Training of the two sexes similar.

[15] Rep., 537.
[16] For other pedagogical principles see Citations 12; Rep., 526–7. Plato seems to think that special training can give general ability.
[17] Citations 16, 17. [18] Citations 11.
[19] See Plato, Laws, and Jowett's Introduction to his translation of Plato's works, Vol. 4, pp. 8, 9, 17, 142 ff.

No gold or silver money; simply tokens. Care to promote simplicity and an approximation to equality. The money question perhaps influenced by this.

Number of families fixed at 5050, the number evidently being selected for its factoring power.

Land allotted to citizens, each receiving a double lot, one near and one remote; two residences. "Let the several possessors feel that their particular lots belong to the whole city." Lots to be equalized in value; each family has at least one lot, and no family more than four; hence bounds of wealth are fixed within narrow limits. Strict penalties for overstepping. Gods have twelve lots, one each.

On basis of this limited difference in wealth four classes are formed. "Offices, contributions, and distributions are proportioned to the value of each person's wealth, and not solely to the virtue of his ancestors or himself, nor yet to the strength and beauty of his person, but to the measure of his wealth or poverty; and so by a law of inequality, which will be in proportion to his wealth, he will receive honors and offices as equally as possible, and there will be no quarrels or disputes."

Electors.— Legislators.— Magistrates, elected by vote or lot.— Courts (graded); judges appointed by magistrates.— General and local assemblies of people also serve judicially, the former as the highest Court of Appeals. Council of 360, to have general supervision of state.

A "Nocturnal Council" composed of old men and young men who attain the highest education. The old men form the deliberative body. "The younger guardians . . . are chosen for their natural gifts and placed in the head of the state, having their souls all full of eyes, with which they look around the whole city. They keep watch, and hand over their perceptions to the memory, and inform the elders of all that happens in the city; and those whom we compared to the mind, because they have many wise thoughts, that is to say the old men, take counsel, and, making use of the younger men as their ministers and advising with them, in this way both together preserve the whole state." . . .

Ministers of Music and Gymnastic, and a Minister of Education are chosen.

The constitution is to be stable. No change. Laws irreversible.

All freemen to be educated.

Position of education in the scheme.— In developing this state Plato naturally makes education a part of statecraft, as in the Republic, but his scheme of education is different from the one just noticed, and it is more clearly outlined. He makes it, even to details, the subject of state law. It has reference also to the practical (as far as Plato can bring himself to the practical), rather than to the transcendental ideal exemplified in the Republic. For this reason one ought not to confound the two schemes or amalgamate them. Gleanings from the Laws will give us the outlines of his secondary education, as he conceived it at a later date than that of his earlier treatise, and will enable us to make some interesting comparisons.

Aims.— "The sum of education," he says, "is right training in the

nursery. The soul of the child in his play should be trained to that sort of excellence in which, when he grows up to manhood, he will have to be perfected." And he defines his idea of education in such words as these: "For we are not speaking of education in this sense of the word (education for a trade), but of that other education in virtue, from youth upwards, which makes a man eagerly pursue the ideal perfection of citizenship and teaches him how rightly to rule and how to obey. This is the only training which, upon our view, would be characterized as education. That other sort of training which aims at the acquisition of wealth or bodily strength or mere cleverness apart from intelligence and justice is mean and illiberal and is not worthy to be called education at all." Another remark brings out the typical Greek dualism, which he now proceeds to apply:—"Am I not right in maintaining that a good education is that which tends most to the improvement of mind and body?"[20]

Periods of education.— The first period of education for which he prescribes is that embraced in the first three years of life. For this period he emphasizes exercise and a careful guarding from fear and sorrow. "If during these three years every possible care were taken that our nursling should have as little of sorrow and fear, and, in general, of pain, as was possible, might we not expect at this age to make his soul more gentle and cheerful?"[21]

From three to six is the period for sport.[22] "Children at that age have certain natural modes of amusement which they find out for themselves when they meet."[23] This is also the time "to get rid of self-will in him, punishing him, not so as to disgrace him." At six comes the separation of the sexes.[23] "Now they must begin to learn, the boys going to teachers of horsemanship and the use of the bow, the javelin, and the sling; and, if they do not object, let the women go too to learn, if not to practice; above all they ought to know the use of arms, for these are matters which are almost entirely misunderstood at present."[23] In this connection he advocates ambidexterity. All this care is to be devoted to physical exercise during these early years, "that all may be sound, hand and foot, and may not spoil the gift of nature by bad habits, in so far as this can be avoided."[23]

The curriculum.— He now reminds us again that education has two branches, one of gymnastic, which is concerned with the body,[24] and the other of music, which is designed for the improvement of the soul. He includes both dancing and wrestling in the former and advises "suitable imitations of war in our dances."

Again, he says: "It will be right also for boys, until such time as they

[20] Laws, 643–44, 788.
[21] Do., 789–92.
[22] Citations 13, 14; Laws, 793–94. One's future work is to be recognized in plays; so these years are formative.
[23] Do., 794–97.
[24] Do., 795 f.; Citations 15.

go to war, to make processions and supplications to the gods, in goodly array, armed and on horseback, faster and slower in their dances and marches, offering up prayers to the gods, and also engaging in contests and preludes of contests, if at all, with those objects. For these sorts of exercise and no others, are useful both in peace and war and are beneficial both to states and to private houses. But other labors and sports and excessive training of the body are unworthy of freemen." [25]

Music.— As to plays, music, and song, he gives very definite limitations. He decides for that which is substantial, established, and regular, the good old fashions as opposed to constant change, and believes such things have close relations with the stability of states.[26]

Physical training.— "Next follow the buildings for gymnasia and schools open to all; these are to be in three places. In the midst of the city, and outside the city, and in the surrounding country there shall be schools for horse exercise, and open spaces also in three places arranged with a view to archery and throwing of missiles, at which young men may learn and practice. . . . In these schools let there be dwellings for teachers, who shall be brought from foreign parts by pay, and let them teach the frequenters of the school the art of war and the art of music." [27]

Letters.— Coming to the "letters" side of musical training he tells us that "a fair time for a boy of ten years old to spend in letters is three years."

Secondary education begins.— "At thirteen years he should begin to handle the lyre and he may continue at this another three years, neither more nor less, and whether his father or himself like or dislike the study, he is not to be allowed to spend more or less time in learning music than the law allows." As to the extent of training in reading and writing he does not leave us in doubt. "They ought to be occupied with their letters until they are able to read and write; but the acquisition of perfect beauty or quickness in writing, if nature has not stimulated them to acquire these accomplishments in the given number of years, they should be let alone."

Selection of material.— On the literary side he follows consistently his idea of conservatism, inclining to a careful sifting according to principles he has laid down. This is in striking contrast with some of the customs of the day that he vividly depicts in these words: — "We have a great many poets writing in hexameter, trimeter, and all sorts of measures, some who are serious, others who aim only at raising a laugh, in which the aforesaid myriads declare that the youth

[25] Laws, 795–6.
[26] Citations 14; Laws, 797 ff.
[27] Citations 15; Laws, 804–5. Both boys and girls are to be taught, and taught alike.

who are rightly educated should be brought up and saturated; they should be constantly hearing them read at recitations, and learning them, getting off whole parts by heart, while others select choice passages and long speeches, and make compendiums of them, saying that these shall be committed to memory, and that in this way a man is to be made good and wise by varied experience and learning."[28]

Arithmetic and geometry.— Finally the growing citizen must study "calculation in arithmetic,"[29] the measurement of length, surface and depth (geometry), and that which "has to do with the revolution of the stars in relation to one another." But it is not necessary to make a technical and extended study of these things, for he says, "not every one has need to toil through all these things in a strictly scientific manner, but only a few, and who they are to be we will hereafter indicate." But "all freemen should, I conceive, learn as much of these various disciplines as every child in Egypt is taught when he learns his alphabet," by way of "pleasure and amusement,"— that is, each one is to gain a simple and elementary knowledge of these arts.[30]

Compulsory education.— This education is to be compulsory, at least part of it, and we may assume that we are to apply to the whole course of ordinary education the following words used in speaking of the "gymnasia and schools open to all" that were spoken of above: —

"Let them teach the frequenters of the school the art of war and the art of music; and they shall come not only if their parents please, but if they do not please; and if their education is neglected, there shall be a compulsory education of all and sundry, as the saying is, as far as this is possible, and the pupils shall be regarded as belonging to the state rather than their parents."

Education for both sexes.— Both sexes are included in this plan, for he continues, "my law would apply to females as well as males, and they shall both go through the same exercises. I have no sort of fear of saying that gymnastic and horsemanship are as suitable to women as men." And again a little farther on he says, "nor will any one deny that women ought to share as far as possible in education and in other ways with men."[31]

Education a serious and strenuous matter.— Studentship is to be a strenuous matter: —"When the day breaks the time has arrived for

[28] Do., 810–11.

[29] Citations 10, 12; Laws, 747, 817–18. Arithmetic is a supreme instrument of education.

[30] Do., 817 ff. Plato hints at higher studies, but gives no details or information about them, unless we are to interpret some of his words as referring to a little advanced geometry and astronomy. See Laws, 818 ff., 968. The latter reference implies that members of the "Nocturnal Council" are to have a special and higher education, apparently dialectic.

[31] Do., 795, 804–5.

youth to go to the schoolmasters." "There ought to be no by-work which interferes with the due exercise and nourishment of the body, or the attainments and habits of the soul. Night and day are not long enough for the accomplishment of their perfection and consummation; and to this end all freemen ought to arrange the time of their employment during the whole course of the twenty-four hours, from morning to evening and from evening to morning of the next sunrise. . . . Much sleep is not required by nature either for our souls or bodies or for the actions in which they are concerned; . . . but he of us who has the greatest regard for life and reason keeps awake as long as he can, reserving only so much time for sleep as is expedient for health, and much sleep is not required if the habit of not sleeping be formed." [32]

Administration.— It remains to say a word as to the state machinery for superintending educational matters. The Nocturnal Council (described in the outline of the state given on page 82), he tells us in Book XII, is "associated with us in our whole scheme of education." Again, "it will be proper," he says, "to appoint ministers of music and gymnastic, two of each kind, one whose business will be education, and the other for the superintendence of contests. In speaking of education the law means to speak of those who have the care of order and instruction in gymnasia and schools and of the going to school and lodging of boys and girls; and in speaking of contests, the law refers to the judges of gymnastic and music." Then there is to be a "minister of the education of youth, male and female; he too will rule according to law, being a single magistrate of fifty years old at least; the father of children lawfully begotten,[33] of both sexes, or of one at any rate. He who is elected and he who is the elector should consider that of all great offices of state this is the greatest; for the first shoot of any plant rightly tending to the perfection of its own nature has the greatest effect on its maturity, and this is true also of men. Man, we say, is a tame and civilized animal; nevertheless he requires proper instruction and a fortunate nature, and then of all animals he becomes the most divine and most civilized; but if he be insufficiently or ill-educated, he is the savagest of earthly creatures. Wherefore the legislator ought not to allow the education of children to become a secondary or accidental matter." [34]

These are good words with which to close the account of the education of the Laws. Plato is in many ways more interesting here than in the Republic. He comes nearer this world, nearer the practical, and he gives more detail. But there is a certain ideal nature, and a certain inspiration in the Republic which also attract us.

A brief comparative summary must close this section: —

[32] Do., 807–8.

[33] To-day we put a premium upon the childless. Plato showed the greater wisdom.

[34] Do. 764–66.

REPUBLIC	LAWS
Aim: — To train conservators of the state. Mind chiefly on "supersensuous man." Philosophical insight.	Aim: — To train a good man, perfectly ruling and ruled, liberally educated, not educated for a trade.
Curriculum (general): —	Curriculum (general): —
Gymnastic and music (words, harmonies, literature).	Gymnastic and music: —
	1 to 3, — exercise; special excitement, fear, sorrow avoided.
	3 to 6, — discipline, sport, games (carefully regulated, old).
	6. Separation of sexes. Learning begins.
Secondary: —	Secondary (partly elementary): —
"Letters," music.	Gymnastic.
Arithmetic, geometry, astronomy: — 1, elementary work, uncorrelated; 2, at 20, correlated work; ideal element prominent.	Reading, writing, literature.
	Music.
	(Boy of 10 takes 3 yrs. for letters, then 3 yrs. for lyre.)
	Arithmetic, geometry, astronomy. No age assigned.
	In all this curriculum, elementary knowledge, not scholarship.
Higher education, — dialectics.	Higher education. — dialectics.
(For those of largest capacity.)	(For select number.)
Method (general and special: —	Method: —
Teachers of high quality.	Early education an amusement. No compulsion in early years, but strict compulsion later. Incessant and vigorous work carefully supervised.
Early education an amusement. No compulsion. The child a "freeman in acquisition. In regular education steady devotion is required. Sleep and exercise unpropitious to learning.	Practical ideas of things.
Education a development. Leads finally to ideas beneath forms, and produces harmony. Studies not an agglomeration of facts, but organized ideas.	Education measured by time rather than amount. Strict limitation of years in education.
Special training may give general ability.	Education for all freemen, both men and women.
Education for "Guardians" only, men only.	

State organization: —
"Guardians" and Dialecticians.
Philosophers rulers.

State organization: —
Nocturnal Council.
Legislators.
Minister of education.
Minister of music.
Minister of gymnastic.
Education thus to be thoroughly organized, not left to accident or private management at all.

CITATIONS

1. **Nature of education.**—"And surely you would not have the children of your ideal state, whom you are nurturing and educating, if the ideal ever becomes a reality, you would not allow the future rulers to be like posts, having no reason in them, and yet to be set in authority over the highest matters? Certainly not. Then you will enact that they shall have such an education as will enable them to attain the highest skill in asking and answering questions? Yes, he said, I will, with your help. Dialectic then, as you will agree, is the coping-stone of the sciences and is placed over them; no other can be placed higher; the nature of knowledge can go no further. I agree, he said."— Rep., 534.

2. **Qualities of leaders.**—"Then he who is to be a really good and noble guardian of the state will require to unite in himself philosophy and spirit and swiftness and strength? Undoubtedly. Then we have found the desired natures; and now that we have found them, how are they to be reared and educated? . . . Can we find a better than the old-fashioned sort? And this has two divisions, gymnastic for the body, and music for the soul."— Plato, Rep., 376.[35]

3. **General qualities needed in those who are to be most highly educated.**— Qualities necessary for those who receive the highest education: —"Preference given to the surest and the bravest, and, if possible, to the fairest; and, having noble and manly tempers, they should also have the natural gifts which accord with their education" (keenness and ready powers of acquisition, a good memory, power of enduring fatigue, solidity, love of labor in any line, whole-hearted industry, love of truth, temperance, courage, magnanimity, soundness of limb and mind). Rep., 535–6. See also 487.

4. "Until then philosophers are kings, or the kings and princes of this world have the spirit and power of philosophy and political power and greatness meet in one, and those commoner natures who follow either to the exclusion of the other are compelled to stand aside, cities will never cease from ill — nor the human race, as I believe — and then only will this our state have a possibility of life and behold the light of day."— Rep., 473.

[35] References are to Jowett's translation.

5. **Method and tests.**— Observation of future guardians from youth upwards; deeds to be performed; toils, pains, and conflicts to be prescribed; pupils to be tried by enchantments; to be tested more thoroughly than gold is tested in the fire, "to discover whether they are armed against all enchantments and of a noble bearing always, good guardians of themselves and of the music which they have learned, and whether they retain under all circumstances a rhythmical and harmonious nature such as will be most serviceable to the man himself and to the state. And he who at every age, as boy and youth and in mature life, has come out of the trial victorious and pure shall be appointed a ruler and guardian of the state; he shall be honored in life and death."— Rep., 413–14.

6. **Both sexes to be educated.**—"Then women must be taught music and gymnastic and the art of war, which they must practice like men? I suppose that is the inference."— Rep., 452.

7. **Content of curriculum.**—"But is our superintendence to go no further, and are the poets only to be required by us to impress a good moral on their poems as a condition of writing poetry in our state? Or is the same control to be exercised over other artists, and are they also to be prohibited from exhibiting the opposite forms of vice and intemperance and meanness and indecency in sculpture and building and other decorative arts; and is he who does not conform to this rule of ours to be prohibited from practicing his art in our state, lest the taste of our citizen be corrupted by him? . . . Let our artists rather be those who are gifted to discern the true nature of beauty and grace; then will our youth dwell in a land of health, amid fair sights and sounds, and beauty, the influence of fair works, will meet the sense like a breeze and insensibly draw the soul even in childhood into harmony with the beauty of reason."

Results to be aimed at.—"Is not this, I said, the reason, Glaucon, why musical training is so powerful, because rhythm and harmony find their way into the secret places of the soul, on which they mightily fasten, bearing grace in their movements, and making the soul graceful of him who is rightly educated, or ungraceful if ill-educated; and also because he who has received this true education of the inner being will most shrewdly perceive omissions or faults in art and nature, and with a true taste, while he praises and rejoices over and receives into his soul the good, and becomes noble and good, he will justly blame and hate the bad now in the days of his youth, even before he is able to know the reason of the thing; and when reason comes he will recognize and salute her as a friend with whom his education has made him long familiar."

"I have no hesitation in saying that neither we nor our guardians whom we have to educate can ever become musical until we know the essential forms, temperance, courage, liberality, magnificence, as well as the cognate and contrary forms in all their combinations, and can recognize them and their images wherever they are found, not slighting

them either in small things or great, but believing them all to be within the sphere of one art and study."— Rep., 401, 402.

8. **Relation of body and mind.**—"Now my belief is . . . not that the good body improves the soul, but that the good soul improves the body. . . . Then if we have educated the mind, the minuter care of the body may properly be committed to the mind, and we need only indicate general principles for brevity's sake." (He goes on to speak of the necessity of abstinence from intoxication, and other matters. He disparages athletic training, and says his guardians must have a finer sort of training.)— Rep., 403–4. See also 410, 411.

9. **Habits to be avoided. Athletic training disparaged.**— Danger of innovations in music and gymnastic. "This is what Damon tells me, and I can quite believe him; he says that when modes of music change, the fundamental laws of the state always change with them."— Rep., 424.

10. **Arithmetic "above all."**—"No single instrument of youthful education has such mighty power, both as regards domestic economy and politics and in the arts, as the study of arithmetic. Above all arithmetic stirs up him who is by nature sleepy and dull, and makes him quick to learn, retentive, shrewd, and, aided by art divine, he makes progress quite beyond his natural powers. All these, if only the legislator by laws and institutions can banish meanness and covetousness from the souls of the disciples and enable them to profit by them, will be excellent and suitable instruments of education. But if he cannot do this, he will intentionally create in them, instead of wisdom, the habit of craft."— Laws, 747.

11. **Geometry.**—"And next shall we inquire whether the kindred science also concerns us? You mean geometry? Yes. Certainly, he said; that part of geometry which relates to war is clearly our concern. Yes, I said, but for that purpose a very little of either geometry or calculation will be enough; the question is rather of the higher and greater part of geometry, whether that tends towards the great end, I mean towards the vision of the idea of the good. . . . True, he said. Then if geometry compels us to view essence, it concerns us; if generation only, it does not concern us."— Rep., 526.

Ultimate ends and aim.—"And do you not know also that, although they use and reason about the visible forms, they are thinking not of these, but of the ideals which they resemble; not of the figures which they draw, but of the absolute square and the absolute diameter, and so on; . . . they are really seeking for the things themselves, which can only be seen with the eyes of the mind? That is true."— Rep., 510.

12. **Value of special training for general ability.**—"Those who have a natural talent for calculation are generally quick in every other kind of knowledge; and even the dull, if they have had an arithmetical training, gain in quickness, if not in any other way." "And in all departments of study, as experience proves, any one who has studied geometry is infinitely quicker of apprehension."— Rep., 526–7.

13. **Play in education.**—"According to my view he who would be good at anything must practice that thing from his youth upwards, both in sport and earnest, in the particular way which the work requires; for example, he who is to be a good builder should play at building children's houses; and he who is to be a good husbandman, at tilling the ground; those who have the care of their education should provide them when young with mimic tools. And they should learn beforehand the knowledge which they will afterwards require for their art. For example, the future carpenter should learn to measure or apply the line in play; and the future warrior should learn riding or some other exercise for amusement, and the teacher should endeavor to direct the children's inclinations and pleasures by the help of amusements to their final aim in life."—Laws, 643.

(Have we here the germs of "gifts and occupations"?)

14. **Stability in play related to stability of institutions.**—"I say that in states generally no one has observed that the plays of childhood have a great deal to do with the permanence or want of permanence in legislation. For when plays are ordered with a view to children having the same plays and amusing themselves after the same manner, and finding delight in the same playthings, the more solemn institutions of the state are allowed to remain undisturbed; whereas, if sports are disturbed and innovations are made in them and they constantly change and the young never speak of their having the same likings or the same established notions of good and bad taste, either in the bearing of their bodies or in their dress, but he who devises something new and out-of-the-way in figures and colors and the like is held in special honor, we may truly say that this is the greatest injury which can happen in a state; for he who changes the sports is secretly changing the manners of the young and making the old to be dishonored among them and the new to be honored."—Laws, 797.

15. **State teachers.**—"Of all these things (dancing, gymnastic movements, military exercises) there ought to be public teachers receiving pay from the state, and their pupils should be the men and boys of the state and also the girls and women, who are to know all these things."—Laws, 813.

16. **Freedom, not compulsion.**—"And therefore calculation and geometry and all other elements of instruction, which are a preparation for dialectic, should be presented to the mind in childhood, not however under any notion of forcing them. . . . A freeman ought to be a freeman in the acquisition of knowledge. Bodily exercise when compulsory does no harm; but knowledge which is acquired under compulsion has no hold on the mind. . . . Do not use compulsion, but let early education be a sort of amusement; that will better enable you to find out the natural bent."—Rep., 536–7.

17. "And the education must begin with plays. The spirit of law must be imparted to them in music."—Rep., 425.

APPENDIX II

SECONDARY EDUCATION IN ARISTOTLE'S POLITICS

Aristotle's state.— Aristotle's state is the basis of his educational scheme. His "politics" and his psychology make a broad foundation for his pedagogy. The state, as he represents it, is the result of a wide induction on his part,— in fact the result of a double induction. From this point of view it may be called a generalized state. From his careful analysis of the individual, who is to give life and reality to his state, it may, like Plato's state, be called a psychologic state. The following outline will indicate some of its main features: —

ARISTOTLE'S PSYCHOLOGIC STATE.— POLITICS, CHIEFLY BOOK VII

Outline.—

Moderate population; all citizens should know each other.

Territory large enough to be "all-producing," and enable the inhabitants to live temperately and liberally in the enjoyment of leisure.

State to be well-located for defense and other purposes. Various topographical details discussed.

State to be "self-sufficing" in regard to groups or classes of inhabitants. Hence a variety of groups, though under this general limitation: —"Conditions of a composite whole are not necessarily organic parts of it."

Two general groups: —

A. Governing group: — Citizens.— 1. Elders,– councilors (also priests), with legislative and deliberative power. 2. Younger men,– warriors, with executive power. Public tables provided for this group, by classes. Land allotted by half socialistic scheme; two portions for each citizen, one for public use (religion and public tables), one for private use. Latter divided into two lots, one near city, one on frontier. Land preferably tilled by slaves, some public, some private. Liberty to be held out as a reward for service. Citizens not to engage in any form of productive industry,— not to do anything "illiberal."

Public education provided for Group A under charge of *Directors of Education.*

B. Governed group: — Artisans, husbandmen, etc.; non-citizens, no land, not educated by state; receive merely education of a trade.

Various offices ministering to different needs of the body politic.

Women not educated equally with men. Probably to have domestic education only.

Criticism of his state.— Aristotle thus aims at the ideal, like Plato. He does not however reach the transcendental. Notwithstanding his

power of generalization he recommends a state organization which violates both nature and science. His limitations and his arrangement of classes prevent him from realizing the highest ideal. As Davidson says, his ideal is a static one.

Aristotle thus has in view in his educational plans only a fraction of the population, the class of citizens or "rulers."[36] He arbitrarily excludes all who engage in professional, mechanical, or agricultural pursuits. This is fatal to his state. It does not, however, vitiate his educational laws and principles as far as they go, though it limits their application and leaves noticeable gaps in educational theory and practice. Another limitation appears in the fact that he makes no provision for women's education outside the family.

This brings us to an analysis of Aristotle's educational scheme, which will give various interesting details and show the distinguishing characteristics of his pedagogy.

Aim.— Aristotle's aim is to develop his exclusive individual on all sides for what he calls "leisure," or better for a cultured life as opposed to a life of business. He says, "I must repeat once again, the first principle of all action is leisure (diagoge)."[37] The end is a very inclusive one as seen in his remark, "education should not be exclusively directed to this (the physical), or any other single end."[38] He finds the fundamental principle in man and provides for developing it. On the psychological side this is the expression of self-activity, the "self-determination" of the individual. The outcome is to be *civic virtue.*

Education to be public,— the same for all.— As to uniformity in the application of educational principles and the working out of educational ends, "since the whole city has one end, it is manifest that education should be one and the same for all, and that it should be public and not private,— not as at present when every one looks after his own children separately and gives them separate instruction of the sort which he thinks best; the training in things which are of common interest should be the same for all. Neither must we suppose that any one of the citizens belongs to himself, for they all belong to the

[36] See outline of state given above.

[37] Pol., VII, 14: 12–18; 22; 15: 1–6; VIII, 3: 2, 6.

This quotation is interesting:— "Since the end of individuals and of the state is the same, the end of the best man and the best state must also be the same. It is therefore evident that there ought to exist in both of them the virtues of leisure; for peace, as has often been repeated, is the end of war, and leisure of toil. But leisure and cultivation may be promoted not only by those virtues which are practiced in leisure, but also by some of those which are useful in business. For many necessaries of life have to be supplied before we can have leisure. Therefore a city must be temperate and brave and able to endure."

[38] Pol., VIII, 4: 2.

state and are each of them a part of the state, and the care of each part is inseparable from the care of the whole." [39]

Aristotle analyzes his individual as follows: —

Educational psychology.—"There are three things which make men good and virtuous; these are nature, habit, and reason. . . . Nature, habit and reason must be in harmony with one another." And again, "Now the soul of man is divided into two parts, one of which has reason in itself and the other, not having reason in itself, is able to obey reason. And we call a man good because he has the virtues of these two parts. In which of them the end is likely to be found is no matter of doubt to those who adopt our division, for in the world both of nature and of art the inferior always exists for the sake of the better or superior, and the better or superior is that which has reason.[40] The reason too in our ordinary way of speaking is divided into two parts, for there is a practical and a speculative reason, and there must be a corresponding division of actions; the actions of the naturally better principle are to be preferred by those who have it in their power to attain to both or to all, for that is always to every one the most eligible which is the highest attainable by him." [41]

With these general remarks as to ends and organization, we come to some specifications as to means and order of training. If we expect a complete and detailed account of a system of education calculated to carry out the author's principles, we shall be disappointed. Aristotle is very incomplete and fragmentary here. Such a symmetrical scheme as Davidson guesses at, and presents as rather more than a guess, may or may not have been in his mind. He appears not to have worked his plans out to that extent. But he presents enough to be suggestive and to give a general idea of his pedagogical thought.

Order of development.— And first as to the order of development. Aristotle is very emphatic here. He says distinctly,[42] "the care of the body ought to precede that of the soul and the training of the appetitive part should follow; none the less our care of it should be for the sake of the reason, and our care of the body for the sake of the soul." And he impresses it again in these words, "Now it is clear that in education habit must go before reason, and the body before the mind." [43]

Periods of education.— From another point of view, order of development may be described by means of the periods into which he divides the life of the child. He makes six clearly marked divisions, 1°, the pre-natal period; 2°, infancy; 3°, to five years; 4°, five to seven; 5°, seven to puberty; 6°, puberty to twenty-one.[44] We should be fortunate indeed if he were as explicit in describing the training suitable for these different periods as he is in marking out the periods

[39] Do., VIII, 1: 1–4.
[40] Do., VII, 14: 9–10. See also 13: 10–12.
[41] Do., VII, 14: 10–11.
[42] Do., VII, 15: 10.
[43] Do., VIII, 3: 13. See VII, 13: 13 and VII, 15: 1–10.
[44] Do., VII, 17.

themselves, but we find little said except for the early periods, and our study calls for something on the secondary period particularly; even here however something useful is gained, if we use our opportunity.

First three periods.— For the first period he prescribes special conditions for procreation calculated to secure worthy offspring. For the second and third he merely makes suggestions as to the diet and physical conditions best calculated to produce a proper citizen. As to this second period he says, "No demand should be made upon the child for study or labor, lest its growth be impeded; and there should be sufficient motion to prevent the limbs from being inactive. This can be secured in part by amusement, but the amusement should not be vulgar or tiring or riotous. The directors of education, as they are termed, should be careful what tales or stories the children hear; for the sports of children are designed to prepare the way for the business of later life, and should be for the most part imitations of the occupations which they will hereafter pursue in earnest." [45]

Crying.— In these words and in others in the same chapter he shows commendable solicitude for the environment of the child,[46] that it shall be made clean and wholesome. Again, he has a word for the crying of the period, believing that "those are wrong who in the Laws attempt to check the loud crying and screaming of children, for these contribute toward their growth and in a manner exercise their bodies. Straining the voice has an effect similar to that produced by the retention of the breath in violent exertions." [47]

Fourth and fifth periods. Formal education through "liberal" studies only.— In the fourth period "they must look on at the pursuits which they are hereafter to learn." The fifth period presumably is intended to be devoted to the more formal side of education. And here it should be noted that Aristotle lays great stress upon liberal as opposed to illiberal studies. "There can be no doubt," he says, "that children should be taught those useful things which are really necessary, but not all things; for occupations are divided into liberal and illiberal and to young children should be imparted only such kinds of knowledge as will be useful to them without vulgarizing them. And any occupation or art or science which makes the body or the soul or the mind of the freeman less fit for the practice or exercise of virtue is vulgar; wherefore we call those arts vulgar which tend to deform the body, and likewise all paid employments, for they absorb and degrade the mind."

Not too detailed and technical training.— "There are also some liberal arts quite proper for a freeman to acquire, but only in a certain degree, and if he attend to them too closely, in order to attain perfection in them, the same evil effects will follow. The object also which a man sets before him makes a great difference; if he

[45] Do., VII, 17: 4–5.
[46] Do., VII, 17: 7–9.
[47] Do., VII, 17: 6.

does or learns anything for his own sake or for the sake of his friends or with a view to excellence, the action will not appear illiberal; but if done for the sake of others the very same action will be thought menial and servile." [48]

That is, anything which smacks of profession or trade is illiberal. Aristotle had the genuine Greek thought as to such things. Freebooting was gentlemanly beside them.

The curriculum. Four branches.— Regarding the actual studies, he says,[49]

"The received subjects of instruction are partly of a liberal and partly of an illiberal character. The customary branches of education are in number four; they are (1) reading and writing, (2) gymnastic exercises (3), music, to which is sometimes added (4) drawing. Of these, reading, writing, and drawing are regarded as useful for the purposes of life in a variety of ways, and gymnastic exercises are thought to infuse courage. Concerning music a doubt may be raised; in our own day most men cultivate it for the sake of pleasure, but originally it was included in education, because nature herself, as has been often said, requires that we should be able not only to work well, but to use leisure well."

Physical education not to include athletics.— Most of the remaining portion,[50] of the book is devoted to two of these subjects, gymnastics and music. Both are to be of the liberalizing type. Educational gymnastics, for example, do not include athletics.[51] "Of those states which in our own day seem to take the greatest care of children some aim at producing in them an athletic habit, but they only injure their forms and stunt their growth." [52] And again, "It is an admitted principle that gymnastic exercises should be employed in education and that for children they should be of a lighter kind, avoiding severe regimen or painful toil lest the growth of the body be impaired. The evil of excessive training in early years is strikingly proved by the example of the Olympic victors; for not more than two or three of them have gained a prize as boys and as men; their early training and severe gymnastic exercises exhausted their constitutions." [53]

The kind of "music" prescribed.— Music is with Aristotle, as with the Greeks of all ages, a prime educational force.[54] It may be reckoned under education, amusement, and intellectual enjoyment, he says. "In addition to the common pleasure, felt and shared by all (for the pleasure given by music is natural and therefore adapted to all ages and natures), may it not have also some influence over

[48] Do., VIII, 2:3-6; Conf. Cicero, De Of., 1:42.
[49] Do., VIII, 2:6-3; 12, 5:4.
[50] Do., VIII, 3 ff.
[51] Do., VIII, 4:1-3; 5-7.
[52] Do., VIII, 4:1.
[53] Do., VIII, 4:7, 8.
[54] Do., VIII, 3:8, 9. See also VIII, 5.

the character and the soul? It must have such an influence, if characters are affected by it. And that they are so affected is proved by the power which the songs of Olympus and many others exercise, for beyond question they inspire enthusiasm, and enthusiasm is an emotion of the ethical part of the soul." [55]

As to the kind of music, he lays down the following principles: —

"Thus then we reject the professional instruments and also the professional mode of education in music,— and by professional we mean that which is adopted in contests, for in this the performer practices the art not for the sake of his own improvement but in order to give pleasure, and that of a vulgar sort, to his hearers. For this reason the execution of such music is not the part of a freeman, but of a paid performer, and the result is that the performers are vulgarized, for the end at which they aim is bad. The vulgarity of the spectator tends to lower the character of the music and therefore of the performers; they look to him,— he makes them what they are and fashions even their bodies by the movements which he expects them to exhibit." [56]

"But for the purposes of education, as I have already said, those modes and melodies should be employed which are ethical, such as the Dorian, though we may include any others which are approved by philosophers who have had a musical education." [57]

Sixth period— For the last period of education he makes only these general suggestions: —

"When boyhood is over three years should be spent in other studies; the period of life which follows may then be devoted to hard exercise and strict regimen. Men ought not to labor at the same time with their minds and with their bodies; for the two kinds of labor are opposed to one another; the labor of the body impedes the mind, and the labor of the mind the body." [58]

It is to be greatly regretted that he has not given more on this period. We may assume that he refers here to the adolescent life from 12 to 21, but this is merely a plausible conjecture. Again we may reasonably assume that the studies are the typical ones that Greece assigned to this period,— science, perhaps advanced work in literature (though both Plato and Aristotle are very strict in defining the limits of literature), and dialectics. But how much science, whether the double course of the Republic or the more elementary course of the Laws, we are not told. We may believe, however, as the end of education lay in the contemplation of pure reason, in "theoria," and in culture rather than practical life, that he inclined more to the idea of the Republic than to that of the Laws.

End in view.— It is certainly interesting to find him making a special feature of adolescence and prescribing for it a special regimen. His dis-

[55] Do., VIII, 5: 14–16. See also VIII, 6: 8.
[56] Do., VIII, 6: 15–16.
[57] Do., VIII, 7: 8.
[58] Do., VIII, 4: 9.

tribution of intellectual work and physical training is also significant.[59] But while his view seems sound, considering his premises, we should substitute for his plan here a pedagogical combination of the mental and physical.

The individual and the state.— In Aristotle's state the individual is still the center. His scheme thus bears the stamp of the period. But his educational plan, which is more systematic, more purposeful, and far better organized than those of his day, would relieve the danger of individualism. He provides for developing physical and psychical powers so as to make a balanced individual, a man of poise, able to live by reason. Hence the state would never be distraught by the unleashing of undisciplined forces in his educated circle. In this way his scheme was a corrective. It would have been a larger one, if he had enlarged the scope of its application. Outside the narrow world for which he planned this education dangers still stalked in all their native power.

To sum up in the form of a scheme the educational details of the Politics we have the following outline: —

Education of a moiety of the male population. No provision for women.

State Education.

Aims: — Development of the whole man for culture and for civic life. Body training before mental training.

1st period,– prenatal period,– best conditions for procreation.

2nd period,– infancy,– careful diet; exercise; allow to cry.

3rd period,– to 5,– suitable exercise; no demand for study or labor; special care to have wholesome environment. Sports preparatory for life.

4th period,– 5 to 7,– they are to look on pursuits they are hereafter to learn.

5th period,– 7 to puberty,– study: – reading, writing, music, drawing, gymnastics (not severe). Athletics discountenanced. Studies "liberal," as opposed to "illiberal."

6th period,– puberty to 21,– 1. "other studies," perhaps the basis of the later trivium and quadrivium; 2. severer physical training.

[59] Do., VIII, 4:9; 5:4.

VII

SECONDARY EDUCATION IN ROME — EARLY PERIOD

Differences in race between Romans and Greeks.— A psychological analysis of the Greeks and Romans reveals striking differences between them. Characteristics differ not merely in proportion, but in kind. The once reputed oneness of race breaks down even at a cursory glance. Some of the contrasts between the two peoples are brought out by the following comparison in which various characteristics are summarized.

Contrasts in Greek and Roman Characters.[1]

Greeks[2]	*Romans*
1. Sophrosyne (temperantia). Arete (virtus), "courage, love of country" (spontaneous but not deep). Eukosima (grace, esthetic expression in all lines). Proportion, harmonious development of physical and mental elements.	1. Virtus (fortitude, etc.). Prudentia. Justitia. Temperantia. Constantia. Honestas. Gravitas. Prosaic and practical ideas. Energy, governing power, intense personality, conscious worth; stronger elements of character prominent.
2. "Innate love of freedom and independence" (free personality). Self assertion. Development for individual, primary, for state, secondary.	2. Bound up intensely in social unit and its expansion, the state. Free and intense public life. "Respect for authority and established institutions."

[1] Compiled from different studies of the Greeks and Romans. Fortified from original sources and classical history. It is unnecessary, even impracticable, to give detailed references. Those familiar with the studies and authors will easily trace.

These are general characteristics that became conspicuous as the two peoples developed.

It will be interesting here to refer to Chapter I which gives some hints as to the origin of the differences between the two peoples.

[2] See chapter IV, page 50. Repeated here to facilitate contrast.

Individuality through the state and in the state. Authority of state from the individual.

3. Versatility. Many-sided activity.
4. Power to generalize, idealize, universalize, and power to make ideals concrete and objective. "Kept going out from simple life and ideas of truth and proportion to a larger life, and thus heightened capacity and power."
   Intense intellectuality and fearlessness in taking up and prosecuting to the end any subject or investigation regardless of issues. "Love of knowledge for its own sake, unfettered by form, religion, or caste."
   "Creative imagination gave form to narrow realities of life."
5. Religion not abstract. Gods idealized human personalities (friendly). "Nature and life full of deity."
   A joyful religion of freedom and spontaneity.
   "Religious concepts, both the highest and simplest, open to all," not limited as in Orient.
   Greeks saw bright and cheerful side. Moulded all in esthetic lines.
6. "Virtuous life a beautiful and happy one," in harmony with self and external relations."
   No "deep religious sense or reverence. No high conception of abstract duty." No strong and steady devotion to principle. No genius

State existed in and through the individual.

3. Stability, persistence. Rather narrow interests.
4. A strong tendency to the abstract and formal (devoted to set forms). "Disinclination to speculation and esthetics," but power to develop a certain strength in these directions.
   Pure intellectuality did not appeal strongly.
   Lack of imagination. Romans occupied with things as they were and their relations.
5. Religion abstract, formal, unimaginative, awe-ful, serious. Gods not "idealized personalities."
   Romans saw a deep spiritual side to everything.
6. Strong moral nature. "Love for directness and truth." Felt obligation to law, duty, justice. Genius for order and system.
   But Romans were utilitarian, practical, cold, calculating, unsympathetic, formal.

for order and system. Genius took other directions.
Greeks "subtle and genial." Not conspicuous for solidity. Not highly developed in truthfulness.
Showed broad and varied human sympathy.

7. No strong family life. Woman subordinate and inferior.

7. "Real family life," strong, compact. Elements mutually helpful and regardful. Woman an important and influential factor, a commanding figure, coordinate, not subordinate.

8. "Education instinctive product of life and people; spontaneous." Also outgrowth of theory and discussion.
At its foundation, a realization of capacity.
Central idea to produce a balance in the factors of life.
"Unity. Comprehensiveness. Proportion. Aimfulness."
Little system or organization.

8. Education natural. Devoted to practical ends.
Careful attention to secure results for self, friends, state.
Order and system prominent.

Most prominent characteristics of Romans.— The most striking characteristic of the Romans evidently was their genius for organization, their predilection for system and for working out formal details. It is not necessary to prove it, for it has been recognized by the world through all the centuries since Rome was an active power. To attempt to explain it at length would be interesting, but it would be beyond our main purpose here. We accept it as a fact and must expect it to give character to Roman education. We may say that sterility of soil, a location not specially conducive to commerce, but strategic for military purposes, and the happy union of tribes and warring elements in her early history made Rome a military nation and directed her naturally to empire building not only for her own safety, but as an outlet for her strong qualities.[3] Empire building requires and develops practical organ-

[3] See Ihne's Rome, 1–2.

izing power. But this is only a surface explanation. The quality was in the basal race before it reached Rome; it was not merely a result of circumstances after that event.[4] With such contrast in character between the Greeks and the Romans we should expect to find striking contrasts in their schemes of education. Such contrasts there were. Especially should we expect to find Roman education well organized.

Two epochs in education.— Roman education is naturally divided into two epochs, 1, that in which old Roman ideas ruled exclusively, or practically so; 2, that in which foreign influence profoundly modified Roman thought and aims. The first extended, roughly, to the Punic Wars, or to about 250 B. C. The second reached onward from this time to the early Christian centuries. The dividing point was the period when Rome began that intimate contact with Magna Græcia and mother Greece that meant eventually the fall of Greece and a fusion of Greek and Roman ideals into a culture that was to be the dominant influence in the West. Though in fixing this dividing line the characteristics of the two epochs overlap somewhat, it is the most logical bound. The two periods are so distinct that they are easily discriminated.

For the sake of comparison and to get a more appreciative idea of secondary education we find ourselves here, as in Greek education, urged to give brief attention to elementary education before touching the secondary period.

Elementary education.— The educational aim in the early period of Roman education just referred to was to develop a hardy, practical youth, capable of maintaining family traditions and the state. The state was undoubtedly supreme, but we can perhaps discern a greater tendency to individual initiative than in Athens. At least there was family initiative. Perhaps if we could compare the two cities at exactly the same dates their predominant units would be found the same.

Practical nature of studies and educational material.—

[4] The characteristics in question were found in Dravidians and a Dravidian amalgamation, known as the Kushika race, that spread westward and left its influence in Italy. There is a Semitic element in Roman thought. Rome was distinct from Athens in the elements of her population. She was more comparable to Sparta in this respect. See Hewitt, Ruling Races, I: XIV–XVI, LXI, 296 ff.

From what has been said we should expect that the training employed to carry out this Roman ideal would be very practical. From the nature of the case, reading, writing and number, from the point of view of utility, would be relatively more prominent in Rome than in Athens. In reading the Romans at first used material very different from that found in early Athenian education, but material entirely in keeping with the Roman type of mind. It consisted of the XII Tables that must be learned by heart.[5] It was not long however before a Latin Homer came in to claim a share of the children's attention, and eventually indigenous Latin literature furnished reading matter.[6] In these standard subjects the standard methods described in Chapter V were used.[7] We should expect this, even the primeval rote learning, which we found still lingering there. Such methods easily adapt themselves to unpedagogical times.

Moral training.— But the Romans made more of moral training than of that which has just been noted. This would be expected of a practical people. Their method here was the best that has ever been devised for perpetuating national ideals,— training through imitation and careful guidance and surveillance.[8] Their models were those of their environment and those cherished in their folk-lore and were well calculated to appeal to young minds. If an over-dose of precept is found, we certainly find with it elements of method well adapted to young and growing citizens. As in later times, moral sentiments probably met the boy also in his writing copies.[9]

Discipline and incentives.— Discipline must always be considered a part of method, even of that which applies to ordinary studies like reading and writing. All testimony goes

[5] Horace, Ars Poet., 322 ff.; Monroe, *op. cit.*, 399 (see also 333–4); Pliny, Epist., VIII, 14.
"Discebamus enim pueri duodecim, ut carmen necessarium, quas jam nemo discit," Cicero, Leg., II, 23 (Becker's Gallus).

[6] "Meam (orationem) in illum pueri omnes tamquam dictata perdiscant," Cicero, Q. F., III, 1:4; Monroe, *op. cit.*, 398.

[7] Becker's Gallus, 189; Pliny, Epist., VIII, 14; Conf. Tacitus, Or.; Monroe, *op. cit.*, 362, 398.

[8] Juvenal, Sat., XIV; Monroe, *op. cit.*, 319 f. (see also 401).

[9] Horace, Sat., I, 4; Pliny Epist., III, 3; Juvenal, Sat., XIV; Tacitus, Or.; Monroe, *op. cit.*, 362–3, 396, 411, 420.

to show that discipline was harsh in Rome.[10] Learning was not an easy nor a honeyed task. Plautus (Bac. III, 13) says, "And then when you were reading your book, if you made a mistake in a single syllable, your skin would be made as spotted as your nurse's gown." On the other hand, it is quite probable that emulation and the stimulus of prizes had their application in this early education.[11] They would not be discordant with early Roman ideas. What we find in later times in this direction is perhaps a developed custom, not a new discovery.

Home education.— In early Rome instruction was frequently, if not generally, carried on in the home, which was a strong one. It was much stronger than the Athenian home, because the mother had a more substantial position and was an influential factor in her children's education.[12] Two strong teachers made the home an impressive school. Another indication of the changed position of woman, which is appropriately mentioned here, is the fact that this education of the elementary period was shared by both sexes.

Ludi.— Schools for both sexes.— There were also from an early date outside schools to which children could be sent,[13] — simple affairs, but in accord with Roman ideas. We have a record of them as early as the fourth century B. C., and they seem then to be a regular institution, so that they probably began at a much earlier date. Here too provision was made for both sexes, and it is significant that school privileges were extended to girls even beyond what is technically called primary education.[14]

[10] Horace, Sat., I, 3: 117 ff; Epist., II, 1: 70; Arts Poet., 343;

[11] See Clarke's Educ. of Children at Rome, and general reference books.

[12] Cicero, Brutus, 210; Monroe, *op. cit.*, 362, 410–11; Pliny, *op. cit.*, III, 3; VIII, 14; Tac. Or., 28.

[13] Martial, Epigs., IX, 8; Monroe, *op. cit.*, 399–400. See Livy, III, 44, "Virgini venienti in Forum (ibi namque in tabernis literarum ludi erant) minister decemviri libidinis manum injecit,"— quoted in Becker's Gallus; Conf. Livy, V, 27 (do.).

[14] Before Rome introduced her common sense way of looking at things, girls were practically left out of account in educational schemes, except in primitive tribes, and they played a minor part there. After a few centuries, especially after the early and fresher centuries of Christianity had passed, education again dropped them from its rolls, to a large extent, and became one-sided once more.

Physical training.— But we must not forget physical training. The hardy Roman character would make this one of the most natural parts of education. Mention of this has been reserved for this place, because it was not a part of the school, technically regarded, as in Greece. It was of a simple nature, and the appliances were also simple, much simpler and more practical than in Athens. There seems to have been no formal plan such as that found in the palæstra. Spontaneous games and exercises and the father's and mother's guidance and teaching were probably sufficient. There was no attempt at the esthetics of physical training. Health and power were the ends.

Education from environment and folk-lore.— Aside from this training in the three lines indicated there was always that spontaneous education coming from impressive Roman life and environment, as well as that coming from the folk-lore of the people, which, though differing in quality and perhaps in amount from the body of folk-lore in Greece, yet formed a substantial body of educational material that became a possession of the trained Roman.

Results.— The elementary years gave the child possession of simple forms and the means for practical communication with his fellows,— all that was necessary for the early Roman state. As there was little literature,— nothing beyond the Laws and some indigenous forms of literature of a rudimentary type,— little was needed in the way of linguistics. Elementary training in reading and writing for practical purposes of business or simple records (inscriptions, etc.), and enough arithmetic for simple operations, with such proficiency as came from imitation and practice in common life, were enough. A study of science in these early times was unnecessary. The Roman's practical sense gained through practical observation gave all that was required. The principle of apprenticeship would fulfil the demands in this direction.

Secondary education — initiation.— Formal training was the work of primary education. Something different was provided for the adolescent. It is true that he probably took pleasure in the old folk-lore, which appealed to him in new ways, but his principal business was to master the institutions

of his country and round out his training for military service. In short, his was a special training in the most essential features of citizenship attendant on, or supplementary to, his initiation into the citizen body, the most significant ceremony in his life. At the end of his fifteenth or sixteenth year, on a festal occasion called the Liberalia, which occurred on March 16th, "the conclusion of boyhood was commemorated, as among the Greeks," by special forms. The *insignia pueritiæ* and the *bulla* were dedicated with a sacrifice to the Lares at the domestic hearth. The *toga prætexta* of boyhood was exchanged for the *toga virilis* (or *pura* or *libera*) with a ceremony at the home and a second one in the Forum. It was not till the toga virilis was taken that the name (given on the ninth day after birth) was confirmed,— another indication that full manhood was reached. The occasion was also distinguished by a special tunic called *recta*. After the home ceremonies the boy was escorted to the Forum, the center of the Roman state and of Roman politics. The company then proceeded to the Capitol to offer sacrifice.[15]

Year of probation, and final stage of education.— Now began the boy's *tirocinium* or novitiate, the introductory stage of his public life.[16] "There was a year of transition or probation during which the behavior of the adolescent was carefully noted." In ancient times at least, the *cohibere brachium* and exercises in the Campus Martius were prescribed for him,[17] and to this we must add, it would seem, more extended physical exercise or drill, on this same field, that was naturally attractive to the adolescent.

Following a model.— But the youth must have more than physical training; there was a life in the city as well as a life in the field. During the introductory period he "frequented the tribunals in the Forum; . . . He was often under the guidance and direction of some striking personality, selected by his father, to whom he attached himself," following, observing, imitating. Under these conditions he gained a very

[15] See Appian, B. C., IV: 20.

[16] "Cotta eo ipso die quo togam sumpsit virilem protenus ut e Capitolio descendit C. Carbonem, a quo pater eius damnatus fuerat, postulavit."—Val. Max., V, 4:4; Suetonius, Claud., 2.

[17] Cicero, Cael., 5.

practical acquaintance with the vital elements of public life.[18] In very early times the ceremonies were perhaps of a simpler character and the father was probably oftener himself the attendant and director in public life. One cannot help admiring this personal solicitude for the pupil and the careful individual work done for him. The contrast with "mass" work is striking.[19]

Results.— Considering Roman intensity and self-consciousness it must be confessed that the boy, on entering public life at eighteen or nineteen, had a pretty definite training fitting him for Roman citizenship, and that it was attained by a method that appealed to the adolescent. There was little formal discipline, but there was much concrete training touching the intellectual, ethical, and physical sides of life. Suggestive ideals were impressed through models from Roman history, past and current, that were persistently held before the view, thus enforcing character and guiding to political efficiency. At the same time it should be noted that this represents the fully developed education of the early period. Back of it was, of course, the still simpler education typified by the schemes in Chapters I and II.

Summary.— A summary in graphic form, as in previous chapters, will enable us to bring the facts together and to make some comparisons.

[18] "The youth who was intended for public declamation was introduced by his father or some near relation, with all the advantage of home discipline and a mind furnished with useful knowledge, to the most eminent orator of the time, whom henceforth he attended on all occasions. He listened with attention to his patron's pleadings in the tribunals of justice and his public harangues before the people. He heard him in the warmth of argument, he noted his sudden replies, and thus on the field of battle, if I may so express myself, he learned the first rudiments of rhetorical warfare." See Tacitus, Or.; Monroe, *op. cit.*, 368; Becker's Gallus, 198. See also Quintilian.

The quotation perhaps contains some late details, but it illustrates the general practice. The references generally are from late authors, but the customs referred to were, in their fundamental ideas, unquestionably old.

[19] In addition to other sources the standard Classical Dictionaries have been used. They furnish various primary references.

Aim.— To train in a practical way a true Roman member of the family and the state (civic and military).— A strong, moral, patriotic, and (under the limitations of state supremacy) independent man.

CURRICULUM AND METHOD.

Elementary (Girls and Boys)	*Secondary*
Language: — (1) Familiarity with folk-lore. (2) Reading (practical not esthetic). Material: — songs, hymns, herotales, XII Tables,[20] rudimentary Latin literature. (3) Writing.	Boy assumes toga virilis at 16 with special ceremonies (religious, etc.). Is enrolled. Training in public and private life. Continues learning of rudimentary literature, etc. (See elementary course.)
Number,— simple calculation.	
Mastery of form, spirit and special characteristics of community life.	
Games.	
All education profoundly religious.	Chants national songs.
Early course advocated by Cato (a typical Roman): reading, writing, Roman law, physical exercises (walking, riding, swimming, boxing).	Gymnastic exercises in C. M. for military purposes.— Practical end, as opposed to the larger idea of Greeks, who included an esthetic purpose.
Method: — Companionship, observation, observance (imitation and practice).	Method: — Companionship of father in Forum, streets, etc.
Formal studies: — Reading,— synthetic method; (1) name and order of letters; (2) form and use. Attention to expression. Memory work.	In later times was added companionship of model man chosen by father.
Writing synthetic plan,— imitation, tracing, etc.	Observation and practice.
Morals,— precept, suggestion through literature, etc., emulation.	Carriage watched.
Education domestic. Mother prominent.	

[20] These laws are found in Wordsworth's "Fragments and Specimens of Early Latin." Oxford, 1874, and (in part) in Allen's "Remnants of Early Latin," Boston, 1880, and (in translation) in Monroe's "Source-Book."

They show advanced political and social organization, but a rather simple industrial development. Ideas of justice are high.

One section deals with the patria potestas, showing the extensive power of the father. The son could not be free from the father till three sales and emancipations had been consummated. Family organization was excessively strong.

"Three successive sales of the son by the father release the former from the patria potestas." Tab. IV.

One passage deals with wrongs inflicted by a tutor on his pupillus. Two passages place those above and those below puberty on a different footing.

He who during the night furtively either cuts or depastures his neighbor's crops, if of the age of puberty, shall be devoted to Ceres and put to death; if under that age, he shall be scourged at the discretion of the magistrate and condemned in penalty of double the damage done. Tab. VIII.

A thief taken in the act, if a freeman, shall be scourged and made over by addictio to the person robbed, but those under the age of puberty shall, at the discretion of the magistrate, be scourged and condemned to repair the damage. Tab. VIII.

VIII

SECONDARY EDUCATION IN ROME — LATER PERIOD

Changes in the later period.— In the second period of Roman education Rome underwent changes similar to those we have traced in Greece, similar, but not the same, for there was a difference in stock and in circumstances.

Rome came into ever-widening contact with other peoples and conditions. It was not the contact of a cosmopolitan people nor of a great commercial people with reciprocal influences, cultural and practical, but first of all a contact of domination and Romanization. Every new state Rome touched — and touching was to gain — she at once organized as a part of her great imperial system that was developed long before the Empire came. She at once started the machinery for governing and assimilating. Hence the effect was more political than cultural. Yet the cultural was bound to be an element in the new acquisitions, for the larger part of the territory into which Rome penetrated in her early expansion was charged with it. However slight an impression it made at first on the new military power in the West, the spirit of culture is always tenacious of life and is sure to grow even on inhospitable soil. But Roman soil was far from being inhospitable. On the contrary it was distinctly favorable, though it would never produce the same quality of culture as Greece. This, however, was neither necessary nor desirable.

Thus Roman ideas were broadening generally, in cultural as well as in political and practical lines. Mere living in the midst of such a thoroughly organized system, involving widely separated and divergent peoples and states welded by masterful Roman ideas, gave a broader education. Much more did it require a broader and more technical education to participate in it.

As far as education was concerned the greatest influence in this world-wide contact came from Greece, first from Italian

Greece, which was early incorporated with Rome, then, intensified and enlarged, from Old Greece itself. Hence came literary ideals and culture ideas that were at first reluctantly,[1] and then eagerly, absorbed.

Changes therefore came from the growth and expansion of Rome and from the stimulus of other culture nations. But it should be remembered that greater and more vital changes came from the natural development of indigenous Roman qualities such as we have referred to more than once. From the combined influences at home and abroad came the following significant results that should be noticed, if we are to understand the changes in education now taking place: —

1. **Democracy.**— There was a notable growth in Roman democracy with its intricate system of assemblies, giving play to the political energies of all the people. This growth followed the exigencies of the moment rather than any logically arranged plan, just as the English constitution has grown. Every movement therefore was an educational episode. Beyond this was the organization of the provincial government, which was systematic and logical, made by trained minds, and occupying them in its execution.

2. **System of law.**— In connection with local and provincial government Rome had developed a system of law, with its machinery, that made a model for the world. It was without precedent, a genuine Roman product, a natural outgrowth of her organizing power. Trained minds made it. It required trained minds to man it.

3. **Language and literature.**— There was a wonderful growth of language and literature. First, indigenous Roman literature made considerable progress before more finished Greek models supplanted it. The latter, however, quickly gave a form and spirit that native genius alone would probably never have given, because the Roman bent was not that way. A wealth of literature was thus quickly at command. It was a great educational force and at the same time served as a conspicuous aim in education. Some of it was borrowed outright, some of it was produced through imitation, an imitation however into which Roman genius and personality were

[1] See page 116.

injected. A nation may advance more, and more quickly secure rich educational material, through such imitation than through unaided effort, if it is fortunate in its models, and Rome was fortunate.

4. **Practical arts.**— Great strides were made in practical arts and the sciences on which they were founded. Rome's public works still excite admiration. Such accomplishments would give greater emphasis to practical studies than was found in Greece.

5. Roman art had a marked development. Though she added some conspicuous features to architecture, her art was generally copy. But it was good copy from good teachers and afforded still further culture material.

6. **Individual development.**— With it all, the period developed an individualism comparable with that of Greece, but somewhat more stable, because not unanchored. The state was a stronger influence in Rome than in Greece. Men could not so easily set it aside. But Roman individualism was narrower than the Grecian; the latter was both intellectual and utilitarian, with emphasis on the intellectual; the other was primarily practical. In each case it gave more freedom in education and accelerated progress.

We may divide the most characteristic changes into two groups, 1, changes in Roman thought, feelings, and activities, due to Greek influence; 2, changes due to the natural expansion and growth of Rome herself and all that Rome stood for. There was something distinctly Roman, a kind of Roman genius, that remained and gave character to everything. Nowhere is this more evident than in education.

Comparison of early and late conditions in Rome.— The main changes in the second period of Roman education as compared with the first may be seen graphically and a little more in detail by reference to the following table of comparisons as to civic and social ideas in the two periods into which we have divided Roman history for our present purpose.

Early Period	*Late Period*
1. State, small, compact,— at most confined to Italy.	1. Rome imperial in size and power, though not in government till the end of the pe-

	riod. Relations more complex. Wider contact with other civilizations (Greek).
2. Attention engrossed by class contests within, settlement of the scheme of government, contests with surrounding peoples. Objects of effort therefore were internal life and Italian supremacy, not culture. Education simple, practical.	2. New interests and new ideas come to view. Old Roman character (see above) so strongly rooted that new culture forces its way slowly and takes on a distinctly Roman type. Colored by Roman traits. Civilization wider, more complex. Education practical. Broader, more complex than before.
3. Thought simple, direct, matter-of-fact.	3. Thought simple and direct, but operates in a wider field. Concerned with wider knowledge. Greek civilization influences.
4. Art simple, practical; religious architecture, city walls, etc.	4. Art has grown under Greek stimulus and in part through Greek artists. Period of civic and private esthetics. Real Roman art practical, substantial, dignified.
5. Language and literature undeveloped; folk-lore,— fabulæ Atellanæ, mimus, saturæ. Only rudiments of literature, but indigenous. Of rude scenic nature for most part.	5. Language developed for literary purposes. A new literature; translations, imitations, original productions grow rapidly. Some genuine esthetic feeling in literature.
6. Individual devoted to state. This is the fundamental idea of life. Intense civic life.	6. Individual devoted to state, but less strenuously in later years.
7. Ideal.— Preparation for state service.	7. Ideal.— The orator.

A Roman ideal.— Under these conditions the ruling ideal is not far to seek. More than in Greece the power of words was the key to influence and preferment. From the time of the irrepressible conflict, when the Plebs burst into the old exclusive organization of the Patricians,[2] skill in debate became increasingly prominent and increasingly exacting. The hust-

[2] De Coulanges, *op. cit.*, 252, 258, 307, 360.

ings, advocacy of measures in the various assemblies, the lawyer's profession, success in provincial government, all suggested and demanded it.[3] Rome was full of action and expression. The quiet ideals of the scholar were not for her. Romans became statesmen of a practical type, and became as naturally orators. Public speaking as a leading object of effort was emphasized by the very concentration of Rome's interests. Thought would be focused on this object more fully in a purely martial and political republic than in a many-sided democracy that supplied more means of influence.

Requirements for meeting the new aim.— However it may be explained, men's thoughts fastened on the orator as an ideal, beyond anything seen before. As in Greece, so in Rome, the scope of his position grew to be so large and the needed equipment so broad and detailed that an elaborate and thorough course of training was required,— for the technique of his profession to give his speech form, for general culture and information to give it substance, and for mental training to give it effect. So the orator in his studies must cover the whole range of human knowledge. The old natural training of early Rome, all-sufficient then, was no longer enough. Language power had become a fine art. It required a more thorough training than in Greece, for public speaking had evidently become a more exacting profession. It was likely to be more thorough, because thoroughness was a native characteristic of the Romans, while brilliance characterized the Greeks. The calling of the lawyer emphasized qualifications similar to those of the orator and thus required a similar course of training. In fact the two callings became identical in preparation.

Influence of the art of authorship.— With the growth in language and literature, literary culture and the art of authorship also demanded an advance in training to meet the higher requirements. The orator's education, from the very nature of Rome's broad conception of her ideal, admirably met these demands of literature, for it involved a very definite study of literary ideals and broad and intense work in composition.

Need of a new school.— Everything points therefore to the need of a new school, new studies, and new methods, to

[3] Appendix 2; Cicero, Murena, 14; Tactitus, Or., 36.

supply the rather formidable requirements of the times. A well defined elementary school had been established in the early epoch. In the period under review it was somewhat modified by the new spirit that was strongly influencing education. What was needed, both from the logic of growth and from the demands of the "orator," was a well equipped secondary school. The secondary age was just the one to be inspired by the orator-ideal and get a good grasp of it.

A model at hand.— Greece had already developed the more detailed and technical curriculum needed to meet the new conditions in Rome. It was found in her grammar and rhetorical schools.[4] With other Greek contributions, welcomed and absorbed by the new Western culture, these schools would naturally come to Rome. The Romans themselves had the ability to invent the needed school under the pressing stimulus of the times. But they had a model at hand that only needed developing and adjusting to meet Roman thought and conditions. Rome was able to give system and organization to the training of the orator. It is hard to tell which is most responsible for the new school, Greek models or Roman character.

In thinking of this advance in school training we are attending merely to the practical demands of the situation. We must not forget, however, that education has inherent power of growth for its own sake, and that, with the general growth of a people many push on in education without regard to the practical.

Character of the secondary school.— From the emphasis on language power the secondary school quite naturally was a *grammar school.* Its name and curriculum were perpetuated in the grammar school of the Middle Ages, and the name still survives in the great Grammar Schools, or Public Schools, of England. This school developed gradually from small beginnings in the third century B. C. to the fully organized grammar school of the first century.[5]

Beyond this school was the Rhetor School that was partly

[4] See Chapter V.

[5] Appendix I; Becker, Gallus, 191–2. This was for boys only, though the education of women had advocates even in those times.

secondary. The lines of separation between the two schools were not always, if ever, hard and fast ones. There was frequent overlapping, one school taking some of the matter and functions of the other.[6]

Opposition.— The new education, particularly the art of rhetoric, naturally had its critics and opponents. The criticism was often just, for the laxer morals and looser methods of the schools, the apparently superficial work of the teachers of the speaking art, and the shading of the old practical civic ideal naturally excited strong prejudice in the sober, practical minds of the Romans. Opposition went so far sometimes that it resulted in state prohibition. But the new came in to meet a definite need. While details may have been bad, its main purpose was a logical and wholesome one. It quickly became popular and secured permanent standing,[7] and at its best could claim as much dignity and moral stamina as the older forms and processes. The old civic ideal and the old morale had not vanished. They still had influence enough to steady new forms.

Core of the curriculum.— The core of the Grammar School curriculum was linguistics, both Latin and Greek.[8] Rome was the first nation to make a formal study of a foreign language a conspicuous part of school life. Very early, not far from the beginning of the fourth century,[9] a knowledge of Greek was a convenience, if not a necessity.

Greek the leading language at first.— At first Greek was probably studied privately by certain people; the grammar school was not yet developed or was in its infancy. But by

[6] Quintilian, Inst. Orat., II: 1; Suetonius, Lives of Gram. (Monroe *op. cit.*, 351–2.)

[7] Quintilian, Inst. Orat., II, 1: 1; Suetonius, *op. cit.*, (Monroe, Source Book, 352–3).

Ancient discipline in the broad sense had become demoralized. Boys ruled. There was inattention on the part of those who pretended to give instruction. "The mischief began at Rome, and has overrun all Italy." See Tactitus, Or., 28, 31–2, 35 (Monroe, *op. cit.*, 360 ff.); Plautus, Bac., III: 3.

For other criticism see Quintilian, *op. cit.*, II: 10; Juvenal, Sat., VII, XIV (Monroe, *op. cit.*, 416 ff.).

[8] Quintilian, *op. cit.*, I. It was significantly called literatura, thus showing something of its scope, Do., II, 1: 4.

[9] Laurie, *op. cit.*, 344.

the second century, or earlier, it was a commanding part of the school program, coming in perhaps with Greek grammarians.[10] At first Greek was the only language taught in the grammar schools,[11] probably because the early grammatici, or at least the best of them, were Greeks. Cicero (Brutus, 90) says,

"I constantly declaimed in private with Marcus Piso, Quintus Pompeius, or some other of my acquaintances, pretty often in Latin, but much oftener in Greek, because the Greek furnishes a greater variety of ornaments and an opportunity for imitating and introducing them into Latin; and because the Greek masters, who were by far the best, could not direct and improve us unless we declaimed in that language."

But in time Latin came to take the precedence. In fact Latin rapidly developed as a literary and oratorical language with high possibilities.

Favorite authors.— The Latin authors most read at first were those of the golden age, Vergil, Horace and Lucan; but later, about the time of Quintilian's death, came a change that brought into favor old masters of prose and verse,— Gracchus, Nævius, Plautus and others.[12]

Studies.— The curriculum thus included first of all language. It was studied intensively, and included orthography, grammar (with little syntax), pronunciation, literary style and content, artistic reading, declamation, composition, literature, in many schools elementary rhetoric and delivery,[13] and even music, which was thought to have special power to give quality to oral and written language. The curriculum included also geography and astronomy, which won favor both as informational and as practical subjects; geometry, which was taken up for its disciplinary value and its utility in common life;[14] arithmetic, of a practical nature; and history. Of these sub-

[10] Do., 359; Quintilian, *op. cit.*, I.
[11] Harper's Dic. of Clas. Antiq., sub. voc., *education.*
[12] Smith's Dic. of Greek and Roman Antiq, sub voc., *Ludus Literarius.*
[13] Quintilian, *op. cit.*, I, 4–11, (study of literature, I, 8; composition I, 9; Rhetoric, II, 1).
[14] "In summo apud eos honore geometria fuit; itaque nihil mathematicis inlustrius. At nos metiendi, ratiocinandi utilitate huius artis terminavumus modum,"— Cicero, Tusc., I, 2, 5.

jects astronomy, geography, and history[15] seem to have been correlated subjects, being taken up in connection with language study. The language subjects were thus the ones that were developed with the greatest care and system. Other subjects were subordinate and often of a very elementary character. Science, including geography, was probably quite primitive, though the latter subject with its appliances would doubtless compare favorably with its counterpart in comparatively modern curricula. It should be noted also that the Roman attitude toward subjects was in strong contrast with the typical attitude of the Greeks who had more of the ideal in their dealings with them.[16]

Physical training.— But there was another side to the curriculum,— physical training, which, though relatively more important in early Rome, held an important place in the adolescent's training at this time. It was even regarded as a useful and necessary part of the orator's training. Physical form and grace of manner and carriage had their force in commending him to hearers.[17] Beauty was a means, not an end as in Greece. Hence we now find schools of exercise in addition to the regular Campus Martius exercises referred to before, and they seem to have something of the Greek idea in their conduct.[17]

Moral training.— Ethical training continued to receive attention. Roman educators, true to the old Roman feeling, still made the subject one of absorbing interest in the curriculum. But the evidence tends to show that the old Roman ideal had been weakened here as in other matters.[18] Such schoolmasters as Quintilian, however, more than revived the older thought,— they revived and systematized it, so that moral values were constantly considered in making out the pupil's course of training.[19]

[15] History occupied a larger and more important place than the others.

[16] Laurie, *op. cit.*, 357 ff.; Quintilian, *op. cit., passim;* Cicero, Brutus, 91, 93.

[17] "Nobis quidem olim annus erat ad cohibendum brachium toga constitutus et ut exercitatione ludoque campestri tunicati uteretur," Cicero, Cael., 5.

[18] Plautus, Bac. III, 3; Tacitus, Or. 28, (Monroe, *op. cit.*, 360 ff.).

[19] Quintilian, *op. cit.*, I: 11.

Teachers.— The designations of teachers who were in charge of Roman schools were significant,— *grammatici* and *rhetores*. In Greece both would have come under the general class of sophists. Rhetores were termed sophists at Rome. Teachers came to be held in high honor, for the practical Roman ideal of the period gave them a place that few teachers have occupied. They were in reality the center of the Roman political development. Quintilian's finest passages lay great stress on the fundamental duty of choosing teachers with great discrimination, especially for early work.[20]

Method in language elaborate.— The typical method was a formal one as far as language proper was concerned. It included dictation exercises,[21] reproduction, grammatical drill, paraphrasing, translation,[22] a critical study of the language and literary qualities of poets, the exegesis of the poets, and memory work. But, in general, mastery of rules, imitation, including a careful study of literary models, and abundant practice were the characteristic features of method. Clarke [23] describes a combination reading, language and literature lesson as follows: [24]

Language and literature.— "Before the pupil read his lesson the teacher probably first read it over for him (praelegere), in order to show him how he wished it to be done. Then he made the sense of the passage clear, knowing that the first requisite of good reading is a thorough understanding. Difficult words and historical and mythological allusions were explained, and attention was called to poetical licenses, foreign words, figures of speech, unusual turns of expression, and the varying senses of the words according to their context. Occasion was taken to impress on the pupil's mind the importance of orderly arrangement, and of the suitable treatment of different subjects and characters, to point out beauties of sentiment and diction, and to explain how in one place diffuseness, in another brevity, is desirable. To insure his perfect understanding of a passage the

[20] Quintilian, *op. cit.*, I: 1; II: 2–3.

[21] Cicero, Q. F., III, I: 4; Horace, Epist. II, 1: 69 ff.; Laurie, *op. cit.*, 368 ff. These dictation exercises were useful also in performing part of the function of text books in the early days, when books were scarce.

[22] Pliny, Epist. VII, 9; Monroe, *op. cit.*, 413 ff.

[23] Clarke, *op. cit.*, 112 ff.

[24] Cicero, Brutus, 89, 91; Appendix to Chap. IX; see also reference 22.

pupil was required to give a prose paraphrase of it, and to explain the metrical construction. Moral lessons were drawn from the words of the poet, and it was explained how the poet's fancy might make use of fictitious situations and characters to present valuable truths." [25]

"Thus the reading lessons from the poets were made the means of instruction in many different subjects — practical ethics, grammar, composition, elocution, geography, mythology, and history."

It is to be noticed that poetry was the standard literature for the Grammar School; [26] prose was relegated to the Rhetor School. Whether intended or not, poetry did not ill-suit the age of grammar, i. e., secondary, school, pupils, though selections from prose literature were also desirable and essential.

So much for methods in language work. The main features and principles have been given here. Much interesting matter as to details will be found in the following chapter and its appendix, where they can be more appropriately taken up.

Rhetoric.— In rhetoric there was concrete work in connection with literature, if we may infer that Quintilian's description of method represents the general practice.[27] There were also text-books and schemes ("topics") to guide pupils in developing themes or forensics. An illustration of the latter is given in the appendix.[28]

Geography and history.— Some hint of method in geography and history has already been given in saying that they were correlated subjects. History came through the reading of Roman and Greek historians, through following allusions in language work, and through the idealization of Roman heroes. In all this the Roman boy got a vivid and impressive idea of Roman achievements and Roman political ideals, and must also have mastered the main facts of Greek history. As to geography it is interesting to note that map work was the conspicuous means of teaching. This was the only practical method.

[25] Such a minute study of literature at the adolescent period would have killed real interest in it, if there had not been some intense object in view, making even such martyrdom tolerable.

[26] Quintilian, *op. cit.*, I, 8, 9; II, 4, 5, 7; Smith's Gr. and Rom. Antiqs. See Appendix 3.

[27] Quintilian, *op. cit.*, I, 8; II, 5.

[28] Appendix 5.

Moral instruction.— The method of moral instruction was the most concrete of all, because there was a wealth of illustrative material here. Training was given impressively through literature and history, and through living models to whom Roman boys were attached for the purpose of learning their methods of public speaking.[29]

Group teaching.— As to organization of instruction, there was doubtless the ordinary class work, but it is very interesting to find reference to group teaching for the sake of meeting individual qualities and stimulating emulation. For such purposes group teaching offers better opportunities than class teaching. It is still more interesting to find a number of references which indicate regard for the individual without thought of emulation. They show that early secondary schools made the adolescent the basis of their work, at least that they had a sympathetic regard for him.[30] Quintilian's description of the best school practices throws strong emphasis upon individual work.

The new school a prototype.— There has thus been established,— in part developed, and in part adopted and adapted,— a formal school program for the adolescent in place of the free and natural training of the early period. This was the Grammar School. It was presided over by the Grammaticus, the Roman grammar master, prototype of the more modern grammar masters in the secondary schools of Europe,[31] particularly of England, and of the early grammar masters of this country, in our earliest secondary schools. This Grammar School became at the end of the first century a well-organized, a well-systematized, and a powerful institution, a great moulding force in the Roman world. Practical aims were prominent in these Roman schools at their best period, but at the same time cultural ideas and opportunities were there and had no inconsiderable influence.

The typical form.— Schools varied in scope and program.

[29] "Long is the path through moral preaching; short and efficacious that through example." Sen., Epist. VI: 5.

[30] Quintilian, *op. cit.*, I, 2: 23. See also Appendix to Chapter IX.

[31] A European Grammar School takes pupils earlier and keeps them longer than our High School, so that comparisons as to names, ages, and curricula cannot be exact.

They probably varied in method and spirit as well.[32] The fundamental branches with language and literature, music and geometry are said to have formed the curriculum for the majority. The typical school however was the Grammar School whose program has been described on the preceding pages. It was the center and determining influence of the Roman school world, the distinctive product of the period. Variations only illustrate the type.[33]

This school gave the preliminary training for the summum bonum[34] of the ambitious Roman, the orator. To carry out this aim in full, however, regularly required additional study and training. This was supplied by the Rhetor School[35] for which the Grammar School was preparatory.

The Rhetor School.— The Rhetor School continued the work in composition, elocution, and mnemonics, making it more intensive. It developed style and effectiveness in writing and confidence in delivery that were preparatory to entering the Forum.[36] It evidently included at least two years of secondary work corresponding to the last two years of our high school curriculum. But it included also higher, or, as we should say, university training through studies not specified in the lower curriculum, and taken up there, if at all, only in a correlated and very elementary and concrete way,— studies like psychology and philosophy, essential for giving a solid

[32] There were of course various kinds of schools as to breadth, standards, and thoroughness. Then again there were schools that gave themselves sensibly to their appointed tasks, suited to the pupils under their charge, and schools that aped higher schools and grasped at some of their tasks. All this was to be expected under private initiative before the days of uniform state aims. It should be noted also that some pupils went from the grammar schools to other professions than that of the orator, and for them a simpler curriculum may have been sufficient. See Laurie, *op. cit.*, 361.

[33] Suetonius, Lives of Gram. (Quintilian). See Smith's Dic. of Antiq.

[34] Tacitus, Or., 36; Cicero, Mur., 4. See Clarke, *op. cit.*

[35] Appendix 2; Becker, *op. cit.*, 192.

Young men sometimes went directly from the Grammar School to the Forum, thus abbreviating their curriculum and proportionally weakening it. Then as now, they hurried toward the goal, and often missed it. Suetonius, Lives of Gram.; Monroe, *op. cit.;* Quintilian also refers to it.

[36] See below, pp. 125-6.

basis for oratory, and studies like civil law, needed by the orator on the technical side in his capacity as lawyer. This school will be considered more in detail in the next chapter.[37]

Rome and Greece compared.— In Greece we found two typical schools, the practical language school, or school of rhetoric, and the philosophical school. The Romans devoted themselves especially to the first. They, however, combined with it, for practical purposes in giving finishing touches to the orator, the main features of dialectic, but rather in form than in the philosophic spirit of the Greeks. Diagogic education was foreign to the ideals of Rome, except for the special few.

A brief summary in tabular form will give a general view of Roman secondary education of this period. It is not necessary to go further into details here. An extended and minute description of the fully developed secondary school under Quintilian is given in the Appendix to the next chapter.

ROMAN EDUCATION OF THE SECOND PERIOD.

Aim: — A practical one. To prepare for a career in State or Forum is the most practical idea. All else is subservient. In spite of the practical aim, however, a high degree of culture resulted.

Women enjoyed elementary education and something more.[38]

The curriculum: —

Elementary — Ages 7–11 (Girls and Boys).	*Secondary — Grammar School — Ages 12–15*
Similar in subjects to education of the early period. But more attention to rapid writing advocated by Quintilian.	Language: — *Reading* (advanced), — diction and expression emphasized; reading as a fine art.
Greek added, — taught conversationally. (Greek became the prominent language in education.)	*Grammar* (Greek and Latin), with minute philological treatment of at least Latin grammar, but not much syntax, and no parsing. *Dictation exercises* (supply the place of text-book, etc.).
Form and expression emphasized in reading.	*Literature* (extracts from
Material: — XII Laws, Homer,	

[37] See Chapter IX, Appendix, p. 142.
[38] See Appendix 4, and Chapter VII, p. 104.

ballads, etc. Maps. Counters and abacus.

Child more under attendants and in school. So more attention to formal education, which was of rather a severe type. Domestic forces weakened.

poets memorized). "Critical study of language and literary qualities of poets"; also "explanation of poets."

Composition, Declamation, Elementary Rhetoric, and Oratory.

Writing (parchment and pen now; wax-tablet is the student's "scratch book)."

Mathematics,— arithmetic, geometry, astronomy (simple and concrete).

History,— correlated.

Geography,— correlated.

Music,— rhythm and meter. Contrasted with Greek ideas.

Gymnastic exercises, — for health and military purposes. End a practical, not an educational one.

Material: — Writing utensils. Maps. Books,— Æsop, Homer and other poets; also prose works; but poetry especially emphasized.

Linguistic training the core of secondary education. All else subordinate. Latin growing as a culture language and winning first place.

In addition to this the boy destined for oratory (the legal profession) had two secondary years in the Rhetor School studying composition, elocution, and literature, and other years of higher work elsewhere.[39]

Method in the Secondary school: — *Language and literature.* Artistic work in reading. Dictation. Reproduction. Paraphrasing. Grammatical drill. Prosody and verse writing. Translation (including cross-translation). Interpretation or exegesis of poets

[39] Varro's curriculum was grammar, rhetoric, arithmetic, geometry, astronomy, dialectic, medicine, architecture, music.

("explanation of the poets"). Close, critical study of literature. — *Elementary Rhetoric and Oratory:* — Scheme and specimens for guidance and training; also text-book work.— *Geography,* map work.— *History,* correlated with language work. Quintilian advocates concrete and correlated work.— *Ethical teaching:* — Correlated with writing, etc. Emulation, rewards.

Outside of literature text-books instruction was chiefly oral. Work often superficial except in linguistics.

Memory work, imitation, and practice were the prominent features of method.[40]

Initiation ceremonies.— But we must not allow this conspicuous and engrossing program of study and training to occupy the field of vision so fully as to hide the old forms. The typical ceremonies of the old adolescent course still remained. The formal exchange of togas, the sacrifice at the Capitol, the "entering of the Forum," with other characteristic forms, were all present. These ceremonies, or at least some of them, had probably increased in elaborateness and detail, but decreased in real meaning and in vital relation to characteristic instincts. In the lapse of time instincts themselves had become quiescent or had been supplanted. The old was rather present as a persistent form; the new represented the actual and real for the training of Roman youth, except so far as sentiment and ceremony served to give significance to changes that occurred at the adolescent period, when the young Roman assumed a new attitude toward work and life,— particularly toward the state. There was one part of the old, however, that remained in vigor. This was the special feature

[40] Method in higher education. See page 122.

Specialized, and conducted in different places calculated to give practical training for different pursuits. Study for scholarship attracted some. For those who entered public life the higher education was advanced training in oratory in rhetorical schools. Training here was given in great detail, following naturally from the secondary course; an intensive course of work, essentially literary, or linguistic, but requiring the whole range of knowledge, to give foundation and substance. Mathematics, law, and philosophy were studied under special teachers, but not regarded as essential factors in rhetorical schools; they were useful for an orator however (see Quintilian). They were "merely touched," except by the few. Law and oratory were the sum and substance of the curriculum for public life. Post-graduate work was sometimes carried on at Athens, Rhodes, etc. See Cicero, Ad At., XII, 32.

of the old secondary training represented in the expressions "*in Forum venire*," "*Forum attingere*." The Roman youth depended much on this for his practical grasp of Roman public life.[41]

Net results of the period.— The last chapters show that with the rise of letters the elementary school came as an introduction to secondary work, and that the higher school was added on the other side to give the technique for professional work. The typical secondary school, shown most characteristically on Roman soil and in Quintilian's time, thus became a formal institution related above and below and accordingly modified in function and curriculum. Its function was a double one, looking on one side toward culture, and on the other toward preparation for the one profession that monopolized attention at the time. In effect it was a vocational school, or rather an introduction to vocational study. It was cultural, because success as an orator involved the highest degree of culture. The old thought, however, that centered in civic development and patriotic mastery of the inheritances of the race was still evident, both in initiation ceremonies, preserved in semblance at least, in great feeling for state service, even though largely a matter of personal ambition, and in enthusiasm for the achievements of the city-state in literature and politics.

APPENDIX

1. **"Grammar."**—"The science of grammar was in ancient times far from being in vogue at Rome; indeed it was of little use in a rude state of society, when the people were engaged in constant wars and had not much time to bestow on the liberal arts. At the outset its pretensions were very slender, for the earliest men of learning, who were both poets and orators, may be considered as half-Greek. I speak of Livius and Ennius who are acknowledged to have taught both languages, as well at Rome as in foreign parts. But they only translated from the Greek, and if they composed anything of their own in Latin, it was only from what they had before read."

"Crates of Mallos . . . was in our opinion the first who introduced the study of grammar (of course in the Roman sense) at Rome." This was about 157 B. C.

[41] Cicero, Amic. 1; Becker. *op. cit.* Probably the passage quoted from Tacitus on page 107 has more force here than in the first period.

"The appellation of Grammarian was borrowed from the Greeks, but at first the Latins called such persons Literati."— Suetonius, Lives of Gram.; Monroe, Source Book, 349–50.

2. **Subject matter of the orator.**— Tacitus in his Dial. de Or. says that "the old orators did not think it necessary to declaim in the schools, and to exercise their tongues and their voices alone upon fictitious controversies, remote from reality, but rather to fill their minds with such studies as concern life and manners, as treat of moral good and evil, of justice and injustice, of the decent and the unbecoming in actions, because these constitute the subject matter of the orator."

3. **Services of poets.**—"The tender lisping mouth of a child the poet forms; even in their early days he turns the ears of the young from evil words; presently he fashions the heart by kindly precepts; he is the corrector of roughness, of malice, of anger; he tells of virtuous deeds; the dawn of life he furnishes with illustrious examples; the helpless and sad of soul he comforts. Whence could the pious boys and virgins learn their hymns of prayer, had not the Muse granted us a bard? The chorus prays for aid, and Heaven's presence feels, and in set form of persuasive prayer implores rain from above, averts disease, drives away dreaded dangers, obtains peace and a season rich with its crops. Appeased by hymns are gods above and gods below." — Hor., Epist. II, 1, 126 ff. (Monroe, *op. cit.*, 398.)

4. **Education of women.**— Musonius speaks of the education of women, and thinks that as far as the culture of virtue is concerned they should have the same education as men; and again he says, "only, as regards any of the most important matters, let not the one be taught differently from the other." He admits however that each sex has its appropriate field, and he would make some exceptions in education, such as omitting gymnastics for women. But he sets great store by philosophy (the science of matters regarding life) for both men and women. See quotations from Musonius given by Laurie, *op. cit.*, 427 ff. (Monroe, *op. cit.*, 401.)

5. **Scheme for composition.**—"It is not to be supposed that the Roman boy had thrown on him the impossible task of producing the exercises above referred to without help and guidance." He was aided in this by "topics" ("loci"), which "had for their object the fixed development of a subject in a certain form and the art of finding arguments. Without entering into details, which however are interesting educationally, I shall borrow from Professor Jullien a statement of the topical hints for an exercise on a chria, *i.e.*, dictum or pregnant sentence ascribed to some distinguished man: *e.g.*, Plato says 'the Muses dwell in the soul of the cultured man.'"

1. A laudation of the writer to whom the utterance or deed was ascribed.
2. The paraphrase, in which the thought was expanded.
3. The motif or underlying principle, which explained and justified the truth of the thought.

4. Comparison, *i.e.*, the comparison of the thought with other thoughts like or unlike, just as Plutarch compares characters in his Lives.
5. The example, which was furnished by some distinguished man.
6. Witnesses to confirm the dictum, *i.e.*, quotations from authorities who had said the same or a similar thing.
7. Conclusion, which often took the form of an oratorical exhortation.

So guided, and with models of similar exercises before him, often written by the master, the boy could scarcely fail to produce a fairly good essay or declamation, especially as the learning by heart of the poets had stored his mind with words and felicitous expressions." Laurie, *op. cit.*, 370–1.

IX

SECONDARY EDUCATION IN QUINTILIAN AND CICERO

From the general characteristics and ideals of Roman education that have been discussed in previous chapters it does not seem strange that the most prominent writers on Roman pedagogy whose works we possess were a consummate orator and an equally consummate teacher of orators. They can hardly be called theorists, as was the case with the two writers on Greek education whom we considered, for the work of one of them grows out of actual educational practice, and perhaps largely out of his own experience, while that of the other is based on existing school programs and on his own work as teacher.

Cicero and Quintilian compared.— We need not dwell on Cicero here, for he contributed little, if anything, that was new in secondary school polity. He was a lay writer chronicling school customs of his day and giving us an attractive autobiography for the period of school life, with some reflections suggested by it. In some respects he is all the more interesting for these reasons. He deserves a distinct place in the history of education. But since he has given us practically nothing that is not included in the educational scheme of the great school man, Quintilian, detailed consideration of his suggestions as to education will be omitted, except for a few notes in the appendix, and the chapter will be given specifically to Quintilian. Cicero is the orator giving a general disquisition on the education of an orator. Quintilian is the educator describing scientifically, and with a wealth of detail and illustration, the course and method of training for what Nettleship rightly calls the great liberal profession of Rome,— the profession of lawyer, senator, statesman combined. We have in effect a masterly account of the training of the liberally educated and professionally educated man. It must therefore

cover the whole range of school life,— elementary education, secondary and higher education, and professional education.

Estimate of Quintilian.— In a way Quintilian summarizes ancient education and lays the foundation for modern pedagogy. He is one of the few great master teachers of the world. His really wonderful book is the first systematic treatise on pedagogy. Through this and his own personal influence as a teacher he impressed himself deeply on school life in general and especially on the secondary school. So deeply did he impress himself on the latter that for many centuries it was largely the embodiment of Quintilian's curriculum and method; even to-day it bears unmistakable resemblance to his model. Secondary school pedagogy does not go beyond Quintilian, except as Quintilian inherited from beyond. The rest were forgotten; his impress alone was acknowledged.

His qualifications for writing on education.— Quintilian's success as a writer on education is largely, if not wholly, due to the fact that he was a practical school man. That he had gained practical experience in the Forum, had been a teacher for many years in Rome and perhaps also in Spain, and had been master of the first state school or college at Rome placed him in the best possible position to write, not only intelligently, but also scientifically, on the subject in question.

Altogether Quintilian is more worthy of close study in this connection that any writer on pedagogy in the history of the secondary school,— at least down to the nineteenth century. However, only a general discussion of his main contributions to secondary education will be in place here. An appendix will supply a full description, with citations, for those who wish to see more in detail what this great master of his art has given us.

Characteristic features of his secondary school. His aim. — The great end of his training was the Roman ideal that has already been sufficiently emphasized, the development of the complete orator:

> "A man, who, being possessed of the highest natural genius, stores his mind thoroughly with the most valuable kinds of knowledge; a man sent by the gods to do honor to the world and such as no preceding age has known, a man in every way eminent

and excellent, a thinker of the best thoughts and a speaker of the best language." [1]

"No man," he says, "will ever be thoroughly accomplished in eloquence who has not gained a deep insight into the impulses of human nature and formed his moral character on the precepts of others and on his own reflection." . . . "I should desire the orator whom I am trying to form to be a kind of Roman wise man who may prove himself a true statesman, not by discussions in retirement, but by personal experience and exertions in public life." [1]

Practical efficiency.— Such is the ideal that his fine educational imagination pictures to him. In his scheme of education, however, he takes the ordinary material of the school and sets himself the task of training to the highest standard possible. His aim is to make an effective man of high character, able to maintain an honorable place in Roman life. It is thus an intensely practical one that should appeal to present day educators whose main thought is practical efficiency.

Curriculum. Composition the central subject.— In his curriculum we should find nothing striking to distinguish it from what has already been given. In fact Quintilian plays an important part in the chapter that summarizes Roman education for the later historical period, though largely without name. It is in detail and in spirit that we find his real contributions. These appear especially and typically in his treatment of composition. Writing was the great medium and means of training. Quintilian cannot say too much for it.[2] It is his main dependence in the training of an orator. He therefore lays out a detailed and thorough course in it, which he describes with great fulness, showing how to begin and the various steps to be taken to give a complete training. Side by side with this, causa exemplorum, goes an equally comprehensive and appreciative study of literature, ancient and modern, Greek and Latin, that of itself would give a liberal education. His remarks as to values and purposes here are both interesting and helpful in understanding his ideal. Literature

[1] See Quintilian, XII, 1, 2. Appendix 2, page 139.

[2] "In writing are the roots, in writing are the foundations of eloquence. By writing resources are stored up, as it were in a sacred repository whence they may be drawn forth for sudden emergencies, or as circumstances require," X, 3:3. See Appendix for details.

is his most important study for training in composition and language. With it, and chiefly correlated with it, goes a careful study of arithmetic and geometry, for training and information rather than for practical value; of astronomy and history, as making for general intelligence and affording a key to the interpretation of allusions; of rhetoric and music, as giving form to thought and style to language; and of elocution and physical training, which add grace to voice and person. His scheme was therefore well-rounded, and its parts were carefully related.

Method.— But he contributes more to pedagogy in his treatment of method than otherwise. His books are rich in minute details as to conducting class work. He explains the manner and spirit in which composition should be guided and corrected; the various kinds of exercises in literature for meeting the ends of discipline and information, and especially for supplying models, ethical, literary, grammatical, and rhetorical; the kind of training in reading that is adapted to pupils of this age; the line of teaching that must be applied to rhetoric to make it a live subject; the method for training pupils in voice, carriage and manner in declamation; and the principles that underlie sound memory training. Much of this is refreshing reading even now, especially his remarks on composition, reading, rhetoric, and memory training. He can hold his own with the best modern pedagogical writers on such topics. In rhetoric he could give the average teacher points that would put him far in advance of his present method of teaching.[3]

Feeling for the boy. Child psychology.— But Quintilian had real feeling not merely for his subject, dear as that was to him, but also for the boy. There was to be no cold dealing out of rules and manipulation of practice and drill, as was often, probably generally, the case. He knew his pupils so thoroughly that his knowledge became intuition, and he interwove in his scheme many a human element and fine feeling for the child. His estimate of teachers from this point of view was correspondingly keen and appreciative. Quintilian thus had two schemes of "concentration" in his educational plan, one in which everything was grouped around his "core,"

[3] For details of method see Appendix.

linguistics, and the other in which the boy was the center, and culture and training material were related to him. Throughout the discussion there is a play back and forth between these two ideas.

Training, not nature.— Quintilian had a genuine enthusiasm for his subject. He treats it broadly and thoroughly, as a means to a great end that calls for the best from teacher, pupil, and curriculum. No catch-penny methods or superficial short-cuts, such as some sophists used, received any countenance from him. He had also a genuine faith in the power of training. Not nature, but training was, in his opinion, the chief factor in the finished product. At the opening of his book he says:

"You will find the greater number of men both ready in perceiving and quick in learning, since such quickness is natural to man. . . . But dull and unteachable persons are no more produced in the course of nature than are persons marked by monstrosity and deformity; such are certainly but few. It will be a proof of this assertion that among boys good promise is shown in far the greater number; and if it passes off in progress of time, it is manifest that it was not natural ability, but care that was wanting,—"[4]

which reminds us that in all ages backwardness in school is generally due to bad teaching at some stage of the child's school life, or to bad habits and bad environment. The high aims of education were never more strikingly and simply stated than by Quintilian.

Characteristic features of his school.— So much for a general statement of Quintilian's contributions to education. To formulate a little more specifically we may give the following tabulation of the characteristic features of his school. This will place them before us a little more pointedly and will give a clearer idea of Quintilian's genius in pedagogy.

A. **His curriculum:** — Linguistic work, with great stress upon grammar, composition, declamation, and literature, is predominant,— in fact practically comprises the secondary course. All else is ancillary and, for the most part, correlated.

[4] Quintilian, *op. cit.*, I, 1:2.

B. **His methods —**

1. The individual is to be studied. Quintilian makes the psychology of his pupil one of his guides in method, whether for the sake of the boy or for the sake of his subject.

2. Talent [5] lies at the foundation, but precocity is decried.

3. Memory is the key to education. Through it the pupil stores a vast amount of information, forms, and models, of all kinds, to weave into his linguistic life. "The chief symptom of ability in children is memory." [6]

4. Habit, as a factor and determinant in education and its subject matter, is emphasized. Memory is the storehouse, habit is the safety-valve in education.

5. Imitation is the beginning and center of intellectual life. Hence the imperative need of a careful choice of teachers and of subject matter in teaching.[7]

6. Stress is laid on the principle of interest as determining the character of at least the early exercises.

7. Provision is made for concrete, objective teaching, broad in scope, splendid in conception.

8. But, after all, close application and persistent work come to the forefront as the real keys to success, especially in the two directions to be noted in the following sections.

9. He insists on extensive and intensive reading of literature for general culture, but more particularly for moral training, and as a means of developing linguistic power. The latter purpose is accomplished characteristically through study, imitation, practice, and original work, the first three supplying a foundation and stimulus for the last.

10. Great emphasis is placed upon practice, but he has regard also for rules. His is a disciplinary course of the most refined and scientific sort, leading up to refined and effective habit. But it is not the formal discipline, sometimes found, that gives a culture forced from without, but rather one that develops personality from within, by which a balance is set up between the external and the internal. How far he is removed

[5] But talent only as supported by industry. Talent is less powerful than training.

[6] Do., I, 3: 1.

[7] Do.; also II, *2*: 1 ff; X, *2*: 1.

from the former is indicated by various passages showing his care for developing personality and individuality.

11. His scheme is therefore marked by careful insistence upon the development of individual judgment and creative power, and it includes careful directions for this purpose.

12. He advocates a discipline that draws, rather than repels, stimulates rather than depresses or represses,— one that harmonizes pupil and teacher.

It thus appears that Quintilian emphasizes, particularly, memory work, imitation, practice, drill, and individual work. On these lines he builds up an elaborate system minutely outlined and splendidly described and illustrated. Education with him has become not only a science, but an art. His thought is based not only on empirical knowledge, but on principles drawn from his own experience and from the work of previous educators, and on the philosophic insight of the trained mind. The tone that comes from the practical school man gives it added charm. His book is so full of substance that it is no easy matter to abbreviate and summarize; for Quintilian is evidently "one of the moderns." He gives us, in germ at least, practically all that modern pedagogy has evolved.

Final influence.— But, taking his Institutes as a whole, his plan of teaching clearly shows a uniformity of formal training. Even his elaborate program of literary study has more or less of the formal in it. Those interesting touches that reveal an appreciation of child nature and of educational development, however, relieve and temper the formality. If it seems surprising that, with these germinal truths that appear frequently, the real nature of education and the educational process was not realized earlier, we must remember that elements of the larger educational life were not brought together, so as to make a lively center of influence for those who were to follow.[8] Thus, though the Quintilian school was as advanced for its time and as well adapted to its time as can be claimed for any school in history, some of its more sig-

[8] Even if this part of Quintilian's pedagogy had stood out most prominently, the political and social conditions, as well as the intellectual bent, of the following years were not favorable to progressive pedagogy. The Grammer Schools copied rather than initiated. But a force was at work that would eventually produce a marvelous reform.

nificant principles were lost sight of. They must wait for a more scientific age to bring a higher unity of educational aims and plans.

Formal discipline.— Whatever may have been true of Quintilian, his followers took the formal system and made it uniform through the whole period of education,— developed and intensified it so that it almost took on the nature of divinity. Quintilian but dimly, if at all, realized education as a subjective process; still less did his followers seem to realize it. Following a path he made so clear they made education a form pure and simple, and this for nearly two thousand years.[9]

Formal training has generally been thought to give something called mental discipline, though the claim may be doubted. It surely did not get at the source of power. After a time came reform in elementary education, and reform has spread to some extent beyond this limit. A part of education has been remodeled according to sound educational science, while a part is still more or less in the shackles planned by Quintilian and forged by his successors.

Ancient and modern oratory.— The Romans made the orator the supreme specialist, the only one who really made himself tell on the world. We have changed matters. The qualities of the orator are being added to real specialists and investigators in all lines, who must not merely make themselves felt by what they discover and know, but must win a hearing by ability to express and to move men in their special fields. On the other hand the orator does not have the same importance, nor hold the same relative position, as that claimed by the orators of Cicero and Quintilian. In one sense the orator's art has been enlarged; in another sense it has been dissipated; or rather it has been divided and its parts scattered over the world of thought and action, each part having grown into something greater than the original whole.

Post-Quintilian development.— We have now before us the first fully developed secondary school of which we have

[9] Now and then appeared a man or school of a different temper. Bernard, Da Feltre, Montaigne, Ascham, Comenius, Milton broke away in a degree from this formal education, but secondary education as a rule remained fast.

detailed record. Though, as we have seen, there were other well-developed secondary schools in earlier times, no complete account has come down to us,— little more in fact than some more or less general statements. Then, too, they lacked that purposeful practical environment that gave peculiar force and momentum to the Roman school, and they belonged to a people who were far from being practical organizers.

Public secondary education.— It remained to make the secondary school public. The movement began at an early date,— about Quintilian's time,[10] when Grammar Schools were already widely scattered. At that time some schools were supported by the state, some by municipalities, some by private funds, while the wandering teacher and private tutor still plied their professions.[11] By 425 A. D. an edict made the state sole authority and forbade the opening of schools by unauthorized persons.[12] We are not however to suppose that all schools were state schools in a literal sense, simply that all were under general state supervision, some in one status, some in another.

Decline of the secondary school.— But the growth of imperialism took away some of the intense motives that ruled in earlier education.[13] Rhetoric was thrown back on itself; it became an end rather than a means. Form became the prominent feature. The Roman Grammar School, like many other civic and social achievements, was declining. A weak institution would have suffered permanent decline. Not so this one. It suffered eclipse, but it still lived.

The source of the modern secondary school.— A real secondary school tradition had thus been started. Through strong organization and powerful influences it eventually became so firmly fixed that the secondary school described in this and the preceding chapter became a dominating model for centuries and a permanent influence. From it modern secondary school influences take their rise. The line of descent

[10] Suetonius, Vesp., XVIII (Monroe, *op. cit.*, 400).

[11] Pliny, Epist., III, 3; IV, 13 (quoted by Laurie); Laurie, *op. cit.*, 420 ff. See Monroe, *op. cit.*, 377 ff.

[12] We find some reference to jobbery in spending public money. Politics entered the schools early.

[13] Cicero, Brutus, 96–7; Dill, Roman Soc. in the Last Cent. of the West. Emp.

of the secondary school passes directly to Rome. It is probable that the organization of the secondary school there,— the enterprising and vigorous handling of the curriculum, and the prosecution of method,— had more to do with defining secondary education for many centuries than any other school agency whatever, and for obvious reasons. The secondary school plan, as finally developed and organized there during this period, ruled the West exclusively down to the time when it had lost its practical nature and Hecker, Francke and their followers began to lead a movement for a new practical curriculum. It continued as the predominating influence long afterwards. This does not mean that Rome originated all, or even many, details, but she took up the tradition, put her stamp upon it, and held it so long and impressed it so vividly that her influence was paramount. Roman pedagogy at its best, Quintilian's pedagogy, found lodgment in many of the great teachers who followed him. The Grammar Schools themselves, many of them, did not die; they were transformed. Though lost to sight, perhaps, they influenced the structures which were built over or into them. Some of the Cathedral Schools of later times could have disclosed the Roman model to one who cared to look within the shell. More than this, they could have shown a continuous tradition from Roman times.

The Roman Grammar School was the strongest moulding force the secondary school had, in form, curriculum, and method, down to the middle of the nineteenth century.

APPENDIX I

A quotation from Nettleship[14] will serve as an introduction to an outline of Quintilian's Institutes: —

A Roman Ideal.—"To be a great statesman at Rome it was necessary, besides being a soldier, to be an orator; a master not only of the cultivated style which would appeal to the forty or fifty educated senators and equites who might meet to try a case in a court of law, but of the broader effects which alone could make an impression upon the great contiones. Oratory (not rhetoric) bade fair, in the hands of a comprehensive genius like Cicero, to absorb the whole field of knowledge and education. To Cicero, if we may trust him in the De Oratore, knowledge is the necessary condition of eloquence, but knowledge must be subservient to eloquence. One can hardly complain of him

[14] Lectures and Essays, Second Series, by H. Nettleship, p. 67.

for adopting a point of view which, after all, was the prevalent one with the mass of educated men in classical antiquity. For, with them, literature was subordinate to life. The idea of investigation, of painful study, undertaken merely for the sake of ascertaining the truth in regions of fact such as history or natural science, was comparatively unfamiliar to the literary aristocracies who ruled the ancient Græco-Roman world."

APPENDIX II

AN OUTLINE OF QUINTILIAN'S COURSE OF TRAINING FOR THE ORATOR, OR THE EDUCATED MAN OF ROME

Prefatory Note: The aim in giving so full an outline is to provide a convenient and authoritative résumé of Quintilian's great work and thus make his rather formidable treatise, twelve books in length, more accessible to students of pedagogy.

The whole outline deals with the secondary school, but the latter part would seem to apply to what corresponds to the upper forms of the typical English secondary schools of fifty years ago,[15] the last years of whose curriculum we are inclined to compare with early college work.

The end in view.— In stating his aim we find Quintilian's statements practically identical with Cicero's, for the most part. The end in view is the perfect orator, "who cannot exist unless he is a good man."[16]

Qualifications of the Orator.—"Let the orator therefore be such a man as may be called truly wise, not blameless in morals only, for that in my opinion, though some disagree with me, is not enough, but accomplished also in science and in every qualification in speaking: a character such as perhaps no man ever was."[17]

Quintilian in another passage lays stress on having ideals embraced in the heart and thinking in conformity with them, and thus having a very practical hold on them.[18]

2. **Four periods in his scheme.**— As to the *grading* and *curriculum*, Quintilian divides his course of training into four parts,— 1, ante-school training; 2, elementary education; 3, secondary education; 4, higher or professional education. In making these divisions it is to be noted that Quintilian does not distinguish by ages. At the very outset he shows that he has no sympathy with those who would make artificial divisions between parts of school life, for he combats the idea that seven should be the age for beginning school work. He says there is

[15] Eton, Harrow, Rugby, and others of that famous group of "Great Public Schools."

[16] Preface to his Institutes, 9.

[17] Do., 18.

[18] For other strong statements of Quintilian as to ideals see Chapter IX, pp. 130–31.

no such beginning, that school life represents a continuity; and again he says that the time for sending to the higher school is when the pupil is qualified; he may enter even before finishing the lower secondary school.

As to the extent of education in the community, Quintilian says nothing. He does not mention the education of girls, if we except the fact that he emphasizes educated parents. But this is natural from the nature of the case. He is writing of the education of the orator and his end colors his whole scheme, but we may easily apply the most essential features of his earlier course to girls, who were readily accorded education at Rome.

Curriculum for each period.— Coming to details of the curriculum, then, we first take up the study and training of the

Ante-school period which is just as systematically provided for as any, through the careful selection of attendants. The chief lines of training here are language (Greek and Latin), writing, ethics, and general information. Greek, he says, should come before Latin, because it is the original of the Latin, and because the boy will learn Latin any way. But Latin is to follow apace, so that the exclusive practice of either may not "impede the other."[19]

The elementary school period[20] seems to continue the work already laid out. Quintilian's efforts are directed especially to two points: 1, a discussion of the question of public and private schools, in which he emphatically decides for the public school with a proper number of pupils, as best for both pupil and teacher; 2, a consideration of management and instruction.[21] This school takes the boy till he is about twelve.

The secondary school,— junior section. The Grammar School.[22] We may fairly conclude that this school took the boy about the beginning of his twelfth year and kept him till about the beginning of his sixteenth year, though Quintilian has no regard for years; he measures by qualifications. In quality and scope the work seems to correspond fairly well with that of the last grammar school years and the first high school years with us, if we take into account the difference in the educational development of the two epochs.

The central subject is grammar,[23] in the ancient sense. We do not

[19] Quintilian, *op. cit.*, I, 1: 12–14.

[20] Quintilian's arguments here are interesting and thorough. See I, 2.

[21] See later pages under *method.*

[22] A typical secondary school of the European type. Compare the English Grammar Schools of to-day, whose curricula are more extended than those of our High Schools, providing for both younger and older pupils.

[23] The old name for grammar was literatura, showing that the subject included something besides the abstract technique of language. The grammar pupil, as the most vital part of his subject, took language in the concrete as well, i.e., literature.

need to come down to modern times to get a good idea of concentration, for the organization of Quintilian's curriculum, with grammar as the core, gives us an excellent example, as far as subjects of study are concerned. Grammar here includes first, the technicalities we usually associate with the subject,—sounds, divisions, relations, limitations, modifications, derivatives, and historical changes of letters; second, the inflexional and formative elements in a language, *i.e.*, all the technicalities of words, making a most abstract and abstruse study; third, all facts and principles associated with the art of "speaking and writing correctly," and thus syntax and composition. But it is much larger than all this. As a basis for composition it carries with it literary study, or, as Quintilian calls it, the "illustration of the poets." This is itself a very broad study, for it gives a knowledge of words and matter, structure and style, and involves knowledge of philology, music (meter and rhythm), and history,[24] in order to explain allusions or otherwise elucidate the text. Such an intensive study under the direction of the master of grammar constantly stimulates thought along various lines. "Grammar" in Rome even extended its limits beyond this and assumed some functions connected with the theory and practice of eloquence.[25] Legitimately this phase of grammar must be regarded as belonging to a separate subject, the second fundamental of the secondary curriculum, *elementary rhetoric* (except in so far as it comes in incidentally in connection with the study of literature just referred to). Rhetoric and grammar are naturally accompanied or supplemented by some elementary work in *elocution*, including articulation, pronunciation, and expression; for after learning to "distinguish words and meanings," the boy must learn "to express meaning." In connection with this literary and linguistic study comes a *carefully chosen course of reading*, both Greek and Latin, in prose and poetry, to furnish models. This course is to be selected with special reference to ethical values at first, till morals are formed. Quintilian believes that *music*[26] is closely related to oratory, that it is calculated to cultivate the voice and give form for language and gesture for the body. So he naturally makes it a prominent part of his curriculum. Wholesome, manly music is his choice, "those strains in which the praises of heroes were sung and which heroes themselves sang; not the sounds of psalteries and languishing lutes, but the knowledge of the principles of the art that is of the highest efficacy in exciting and allaying the passions." *Geometry* is chosen as another essential study in his school, both for its subject matter and for its training value, for he believes that it excites the thinking powers, sharpens the intellect, quickens perception, affords training in logic, and at the same time gives useful knowledge that delivers one from embarrassing errors. It is interesting to note that under geometry Quintilian includes "*numbers*" and astronomy.[27]

[24] I, 8.
[25] II, 1.
[26] I, 10.
[27] I, 10.

But Quintilian lays most stress, as we shall find, on writing (composition),[28] as a means of forming his ideal. His elementary course includes grammatical drill, reproduction, paraphrasing, and narrative work.

Finally comes some elementary training in *delivery*[29] (elocution), involving rules for pronunciation, expression, grace and propriety of motion, but not theatrical effects. It thus brings in physical instruction in the palæstra for graceful carriage, and some training under an actor for elocutionary purposes.

Secondary School,— second period. The School of Rhetoric.[30] The youth entered this higher school sometime about the beginning of his fifteenth or sixteenth year. This and the quality and content of the curriculum offered seem to show that we have here at least two years corresponding to the later part of our high school course of training. As already said Quintilian does not care for fixed limits of age. He complains that pupils go to the School of Rhetoric too late, the grammar masters having usurped some of the functions of the teachers of rhetoric, so that old bounds between the two schools have been removed, or at least disturbed. Thus teachers of the higher courses now confine themselves only to a part of their legitimate work, and pupils are kept in the Grammar School too long. He would have each school keep its proper functions.[31]

The School of Rhetoric provides advanced training in composition and delivery to supply a broad and practical foundation for the public activities of the orator. It provides also special memory training which Quintilian emphasizes particularly in his school plans. Quintilian lays out a very inclusive course in *composition,* in which he sets the roots of eloquence.[32] Beginning with simple narration he advances to somewhat technical forms of composition that have to do with the final aims of the orator. He cordially indorses Cicero's thought as to the relation of writing to oratory: —

"In writing are the roots, in writing are the foundation of eloquence; by writing resources are stored up, as it were, in a secret repository, whence they may be drawn forth for sudden emergencies or as cir-

[28] I, 9.

[29] I, 11.

[30] See Book II and following books, especially X.

With Quintilian's informal grading it is difficult to draw the lines in secondary education. The previous period (*Grammar-school period*) would seem in part to include training corresponding to that of the lower "forms" of the English Public School. For the rest it was secondary. The Rhetorical School again should not be regarded in all its parts as beyond the secondary mark. It evidently included both secondary and higher training.

[31] It is interesting to find one school usurping the functions of another. It was as vicious then as ever to imagine that higher grade work was higher work and carried more distinction with it.

[32] II, 4. Conf. X, 5.

cumstances require. Let us above all things get strength, which may suffice for the labor of our contests and may not be exhausted by us." [33]

In writing Quintilian emphasizes pure Latin; care of words and utmost care of matter; the significance, form, and measure of words; adaptation of words; expression, in which, he says, lie the faults and excellencies of oratory; and arrangement, in regard to which he aptly suggests that the order of words, the typical divisions of the oration, and the effective marshalling of all depend upon the situation.[34] Naturally in connection with this work in composition, as in his Grammar School program, he has a *wide course in reading*,[35] including both Greek and Roman writers,—poets, historians, philosophers, orators. Here he gives characterizations of each writer in his list and explains the limitations in the orator's use of poetry and history. For training in *delivery* [36] he provides a graduated course,—simple declamation, fully prepared beforehand and growing in difficulty, half extempore speaking, *i.e.*, speaking after premeditation, and finally extempore speaking. In this connection he suggests exhaustive training as to voice and gesture, in which he again includes work with the actor and in gymnasium or palæstra. This is the climax; it represents the completion of the orator's development. In this and in all the training of the Rhetor School he significantly urges vigorous preparation for what is needed in the Forum, the center of interest for every active Roman. As to *memory training* [37] Quintilian is interesting, suggestive and enthusiastic. It is a favorite topic with him. But he does not favor an artificial system of mnemonics like that of Simonides. He suggests rather a simple, common sense plan in which he lays stress on order, arrangement, and method (elsewhere defined).

Now we may justly assume that the more elementary parts of this curriculum were distinctly secondary, occupying the secondary years that have been referred to as belonging to the rhetorical school, because it took adolescents that had barely entered their sixteenth year.[38] The more intensive and technical work of the different courses that have been outlined belonged to what we may call higher education, and to them were added *psychology*, or the part of it that has to do with the emotions,[39] *philosophy*,[40] a three-fold subject, including "natural philosophy," ethics, and dialectics, all of which Quintilian believed useful and even necessary for the end in view, and *civil law*.[41]

[33] X, 3: 1–3.
[34] II, 13; VII, 1; VIII, Introd., 17–32; X, 1: 5–15.
[35] X, 1; see XII, 2: 29.
[36] XI, 3.
[37] See XI, 2, et al.
[38] See above, p. 142. The typical European secondary school differed and differs very materially, not to say radically, from the American High School in age-groupings.
[39] VI; XII, 2.
[40] XII, 2.
[41] XII, 3.

Such is the outline of the different schools which Quintilian includes in his scheme of education. We come now to some points as to method.

Principles and methods.— Where Cicero is weak Quintilian is naturally strong. In method his books are noticeably rich and afford scope for an interesting and suggestive study. For clearness it is well to take up the four periods separately, making four groups of suggestions as they occur in the several sections of the work dealing with the different parts of school life. It will be interesting to see how, when, and how often Quintilian makes his various pedagogical observations. Later the matter can be condensed into a general outline that will give his main principles. If some of the statements appear not to bear strictly on method, they are at least suggestive in that direction.

I. The ante-school period.— *Principles and method.*

1. Memory:— "The chief symptom of ability in children is memory." —"The elements of learning depend on memory alone, which not only exists in children, but is at that time of life even most tenacious." "It is almost the only faculty, in early years, that can be improved by the aid of teachers."[42]

Imitation, in Quintilian's judgment, is the foundation of method. Memory is the chief stay of method,— a growing means of carrying it out. He naturally has something worth reading as to the cultivation of this power. Here is a brief summary of his suggestions: —

(a) The fundamental condition of good memory power is good health.[43] (b) The second condition is good training.

Memory may be trained by learning a piece by parts; by learning from the same tablets on which one writes; by learning aloud for the double stimulus of speaking and hearing; by learning from another's reading, with frequent tests to avoid slips; by "division and arrangement." He assigns a minimum value of systems of mnemonics and a good deal of value, for certain purposes, to more or less natural associations with signs and symbols.[43] The "only and great art of memory . . . is exercise and labor." By beginning in childhood with a small but interesting memory task, increasing it a little each day, and keeping up the exercise persistently through different periods of life in serious tasks, the orator may accomplish almost "inconceivable results."[44]

2. The child is imitative. Habits formed early are permanent. "The next symptom (of ability) is imitation."[45] . . . "A great portion of art consists in imitation."[45] Everywhere this is his basal principle in method. It will be found giving character and direction to the work of each period in his system. Quintilian follows his principle out logi-

[42] I, 1:19, 36; 3:1.
[43] XI, 2:35.
[44] XI, 2:27 ff., 41.
[45] I, 3:1; X, 2:1. What is said in the following paragraphs on this topic comes from statements found in different parts of the Institutes. There will be specific additions as the different periods are taken up.

cally; for he insists upon great care in choosing those who are to take charge of the child,—attendants, nurses, slaves, pædagogi, for whom good language, good morals, and some knowledge are prime essentials. Parents are to have as much learning as possible.[46] All the subject matter of the boy's course is to be selected wisely to furnish suitable models for developing vocabulary, expression, style in speaking and writing, and substantial moral qualities.[47] The principle would also prescribe equal care in selecting the living model whom, according to the old Roman custom, the boy was to choose and follow for the purpose of perfecting himself in the art of oratory.[48]

Quintilian, however, does not have in mind any narrow or formal principle. Models are not to be merely copied, but studied with a view to getting at their excellencies and defects and using them as a basis for modifying, adding, and improving, and thus for developing independent power. Judgment and discretion are to be superior to all rules and models, and Quintilian's methods are calculated to develop these qualities.[49] While therefore the principle provides for training the boy in the best the world has produced and thus tends to perpetuate modes and styles in oratory, it provides also for judgment and originality as modifying factors.

"If it is not allowable to add, . . . how can we ever hope to see the complete orator? . . . Even those who do not aim at the highest excellence should rather try to excel than merely follow their predecessors." Otherwise, he points out, one will fall behind his ideal . . . "He who shall add to these borrowed qualities excellencies of his own, so as to supply what is deficient in his models and to retrench what is redundant, will be the complete orator whom we desire to see."[50]

It is however imitation of the simple sort, child imitation, that he applies in the early school. Later schools built up judgment and originality.

3. Quintilian has high regard for talent and natural aptitudes. But he has a higher regard for the magic power of training.[51]

4. Those of tender years are not to be urged severely, and the principle of amusement in instruction and that of emulation and rewards are to be used. Having provided formal instruction for these early years, he must make special provisions lest it miscarry.[52]

"It will be necessary above all things to take care lest the child should conceive a dislike to the application which he cannot yet love, and continue to dread the bitterness which he has once tasted, even beyond the years of infancy."

[46] I, 1.
[47] I, 8; II, 5; X, 1, 2, 5; XII, 4.
[48] X, 5: 19, 20.
[49] II, 13; X, 2.
[50] X, 2: 9, 28.
[51] I, 3: 1; II, 4: 9 ff.; 8: 5.
[52] I, 1: 20.

5. Quintilian gives an important place to the physical. It is the highway to success and successful method.

"It is common alike to learning by heart and to composition that good health, excellent digestion, and a mind free from other subjects of care contribute greatly to success in them." [53]

And, speaking of the work of older students particularly, he says,

"But in every kind of study, and especially in such nocturnal application, good health and that which is the prime means of securing it, regularity of life, are necessary, since we devote the time appointed us by nature for sleep and the recruiting of our strength to the most intense labor; but on this labor we must not bestow more than what is too much for sleep and what will not leave too little for it."

6. Coming to the matter of the child's school work, we find that Quintilian would teach reading [54] by the time-honored synthetic method, though he makes some improvement on it. The common practice was to learn the names and order of letters before their shapes. He advocates learning appearances and names first. Imitation and tracing are the means, and children may use ivory letters in play. Syllables follow, and they are to be learned by heart, even the most difficult. "There is no short way," he says.[55] Then comes the formation of words from syllables, and phrases from words, and so on to reading. Training in pronunciation is to include practice in hard combinations of sounds that remind us of the old "Peter Piper." Quintilian is very careful as to progress in reading. He urges teachers to avoid haste, so as to prevent interruption, hesitancy and distrust. A good reader must be able to attend to the words at hand and look ahead at the same time. This must become a habit and the habit requires slow and sure work.[56]

In writing, the tracing method is to be followed. Quintilian lays stress on rapid writing. So the subject is to receive a different kind of attention from that which had been customary in Rome.

"For, as writing itself is the principal thing in our studies, and that by which alone sure proficiency, resting on the deepest roots, is secured, a too slow way of writing retards thought, a rude and confused hand cannot be read." [57]

But correlation relieves some of the abstractness in his system, for rich subject matter is to be chosen for writing and memory work and also for reading, giving good words and thoughts and useful knowledge.

[53] XI, 2:35; X, 3:26.
[54] I, 1:24 ff.
We must remind ourselves here that Greek comes before Latin in the curriculum, though it precedes only by a little.
[55] There is, however, an easier and more pedagogical way.
[56] I, 1:33.
[57] I, 1:28.

II. The elementary school period.— *Principles and method.*

1. The public school is preferred for pedagogical reasons; it makes, he believes, better pupils and better teachers.[58] This is surely an element of method; for the whole environment is to be considered.

2. Here again great care is to be exercised in choosing teachers. As to the attitude of teachers, instruction is to be guided by affection more than by duty.[59] The management of the school is to be definite, systematic, and impressive, with strong moral results,[60] but Quintilian would have no corporal punishment. Strong and sane arguments against it are given in one of his finest passages.[61]

3. The teacher must study the pupil, to learn his capacities and disposition. This evidently gives the basis for another fundamental and far-reaching principle that is implied or expressed in various passages,— that amount and quality of work, the qualities of the teacher, and his method of teaching should be adapted to the capacity, development, and disposition of the pupil, as well as to the general qualities of boyhood.[62]

4. Relaxation is necessary. Quintilian cordially advocates it within due bounds.[63] In this connection he says significantly: "In their plays also their moral dispositions show themselves more plainly."[63]

These are general principles of method. As to special method, since the subjects of the ante-school period still continue and the two periods really make one, we may assume that the methods in the special subjects were similar to those before described.

III. The Grammar School period. The secondary school — first part.— *Principles and method.* 1. After learning to distinguish words and meanings comes learning to express meaning. Here Quintilian wishes pieces of worth and of benefit to the reader to be chosen. He calls for care as to ethical values, advising that doubtful works be postponed till morals are formed. The value of content is thus suggested, apart from the formal training in the subject.

"Those writings should be the subjects of lectures for boys which best nourish the mind and enlarge the thinking powers; for reading

[58] I, 2.
[59] I, 2 : 15.
[60] This appears elsewhere.
[61] I, 3 : 14 ff.
That moral training is not weak or superficial and loses nothing from the absence of corporal punishment the following passage clearly shows: —
"A child is as early as possible therefore to be admonished that he must do nothing too eagerly, nothing dishonestly, nothing without self-control; and we must always keep in mind the maxim of Vergil, "*Adeo in teneris consuescere multum est.*" I, 3 : 13.
[62] I, 2 : 28; 3 : 6. See also II, 2 : 14; 4 : 4 ff.; 5 : 1; 6 : 4; X, 2 : 20; and especially II, 8.
[63] I, 3 : 8.

other books that relate merely to erudition advanced life will afford sufficient time." [64]

All this shows true pedagogical insight. It is the period for ideals. Quintilian, true to principles like these, is very selective in the books he recommends.

2. On the formal side, literature is to be taken up so as to give a many-sided study, including interpretation, analysis, grammatical points, figures, different significations of words, disposition of parts, adaptation of literary treatment to the requirements of the subject, and allusions.[65] Pronunciation and expression are to receive attention in reading, the actor supplying some instruction here. Gesture and general carriage are also important, and here he recommends the use of the palæstra.[66]

3. Composition work involves the telling of the stories of the poets and the fables of Æsop, the paraphrasing of poetry, narratives from poets, sentence work, and drill (by sentences) on inflections.[67]

4. Following his main thought that the orator is trained through writing and speaking, Quintilian provides for both methods here, as in later courses. The pupil is to "speak pieces," portions of speeches that he has committed to memory, "in a loud voice and exactly as he will have to plead," all this under a "skilful tutor." [68] It would also appear that he is to be trained in oral reading, using both poetry and prose from a selected list suitable for young boys.[69]

In addition to these central subjects there are other studies, correlated or supplementary, that with them make an extended curriculum. They are history, music, and geometry, as we have already seen.[70] But Quintilian occupies himself in discussing the value of these subjects rather than in giving details of method, except for showing that he would teach history through correlation. As to the whole plan for this period however he makes the reassuring statement that there is no danger of crowding the curriculum, for the time is long and it is easy to take many studies at once, especially as "variety refreshes and recruits the mind." Not all the minutiæ are to be given, but more general knowledge. And yet the curriculum is not a soft one. It requires strong, patient work. Quintilian thinks however that it will appeal to such as have a genuine interest in "eloquence, the queen of the world," not a mere fondness for the returns that their studies will bring them.[71]

[64] I, 8:8.
[65] I, 8:13 ff.
[66] I, 11.
[67] I, 9.
[68] X, 11:14.
[69] I, 8.
[70] 1:10. Probably geography correlated with literature is also included in his plan.
[71] I, 12:16 ff.

IV. The secondary school — second part. — *Principles and method.*

1. The very best teachers are to be selected at the outset. He uses these significant words as to some of the needed qualifications: —

"I do not consider him who is unwilling to teach little things in the number of preceptors; but I argue that the ablest teachers can teach little things best, if they will; first, because it is likely that he who excels others in eloquence has gained the most accurate knowledge of the means by which men attain eloquence; secondly, because method, which, with the best qualified instructors, is always plainest, is of great efficacy in teaching; and lastly, because no man rises to such a height in greater things that lesser fade entirely from his view." [72]

Morals are of prime consideration now, and are to be investigated with special care in the case of these teachers, not because he does not consider that the same examination should be made, "and with the utmost care, in regard to other teachers,— but because the very age of the pupils makes attention to the matter all the more necessary; for boys are consigned to these professors when almost grown up and continue their studies under them even after they become men; and greater care must in consequence be adopted in regard to them," so as to secure each age against the dangers peculiar to it. The master must be an example, and he must "regulate also, by severity of discipline, the conduct of those who come to receive his instructions." He is to take the attitude of a parent, and pupils are to look to the teacher as to a parent. He must take the proper mean between austerity and an affability that is too easy, so as to avoid both dislike and contempt.[73]

"Let him discourse frequently on what is honorable and good, for the oftener he admonishes, the more seldom will he have to chastise. Let him not be of an angry temper, and yet not a conniver at what ought to be corrected. Let him be plain in his mode of teaching and patient of labor, but rather diligent in exacting tasks than fond of giving them of excessive length. Let him reply readily to those who put questions to him, and question of his own accord those who do not. In commending the exercises of his pupils let him be neither niggardly nor lavish; for the one quality begets dislike of labor, and the other self-complacency. In amending what requires correction let him not be harsh, and least of all reproachful; for that very circumstance, that some tutors blame as if they hated, deters many young men from their proposed course of study. Let him every day say something, and even much, which, when pupils hear, they may carry away with them, for though he may point out to them in their course of reading plenty of examples for their imitation, yet the living voice, as it is called, feeds the mind more nutritiously, and especially the voice of the teacher whom his pupils, if they are but rightly instructed, both love and reverence. How much more readily we imitate those whom we like can scarcely be expressed." [74]

[72] II, 3:5.
[73] II, 2:2.
[74] II, 2:5 f.

It would be hard to find a passage of this length packed with more good pedagogy.

Again he says, in a chapter in which he writes delightfully on the relations between pupil and teacher,—

"Neither can eloquence come to its growth unless by mutual agreement between him who communicates and him who receives." [75]

The teacher is to show his worth and his appreciation of the pupil's position also in another way,— by a plain and simple manner of teaching, so that the learner may not be deterred by complicated presentation, and thus lose interest in his study.[76]

These suggestions of Quintilian not only tell us about the teacher, but also give us much information about his method. Quintilian certainly has a clearly cut idea of the instructor who is to come up to his standard. The qualities of the secondary school teacher might be summed up in the two words, learning and sympathy.

2. On the part of the pupil he chooses a modest attitude and disapproves of demonstration, "standing and showing exultation and giving applause," to be "repaid in kind." [77]

3. In the direction of individual work we may note the following points, most of them suggested by passages already quoted: — We are to understand the nature of the child at work; to suit instruction to individuals; to separate ages; to adapt training to different ages; to observe differences in ability, ascertain the direction in each case, and direct accordingly,

"because nature attains greater power when seconded by culture; and he that is led contrary to nature cannot make due progress in the studies for which he is unfit, and makes those talents, for the exercise of which he seemed born, weaker by neglecting to cultivate them." [78]

But Quintilian defines his thought on such topics as follows: —

"To distinguish peculiarities of talent," he says, "is absolutely necessary; and to make use of particular studies to suit them is what no man would discountenance. For one youth will be fitter for the study of history than another; one will be qualified for writing poetry, another for the study of the law, and some perhaps fit only to be sent into the fields. The teacher of rhetoric will decide in accordance with these peculiarities, just as the master of the palæstra will make one of his pupils a runner, another a boxer, etc.

"But he who is destined for public speaking must strive to excel, not merely in one accomplishment, but in all the accomplishments that are requisite for that art, even though some of them may seem too difficult for him when he is learning them. . . . Yet I would not fight against nature; for I do not think that any good quality that is innate should

[75] II, 9: 3. Another significant passage is found in II, 4: 12.
[76] VIII, Introduction, 1–5.
[77] II, 2: 9–10, 11.
[78] II, 8: 5; II, 4: 9–14.

be detracted, but that whatever is inactive or deficient should be invigorated or supplied.[79]

It is to be noted that Quintilian is not speaking of general talent here, but of interests. We are likely to confuse ideas if we do not discriminate in this way. We have already referred to Quintilian's creed as to talent. As to the boy's interests, modern pedagogy, as far as education is concerned, would lay more stress upon acquired interests than upon natural interests. One cannot determine his real interests,[80] nor detect the direction of his best ability, till he has come into contact in a genuine educational way with many things. Education, to be truly selective, must select from the multitude, not from the few. Hence the multitude must go to school.

4. So much for general observations. We come now to some pedagogical directions as to a special subject,— composition, that we may with advantage remind ourselves is the key-subject in his curriculum.

(a) The teacher is to begin with that to which the pupil has learned something similar under the grammarians (*i.e.*, in the previous school).[81]

(b) His feeling for the boy is shown by his attempt to meet his qualities. He has the real boy in mind with his crudeness and his real characteristics.[82] Here is a characteristic passage: —

"That temper in boys will afford me little hope in which mental effort is prematurely restrained by judgment. I like what is produced to be extremely copious, profuse even beyond the limits of propriety. Years will greatly reduce superfluity; judgment will smooth away much of it; something will be worn off, as it were, by use, if there be but metal from which something may be hewn and polished off, and such metal there will be, if we do not make the plate too thin at first, so that deep cutting may break it. . . .

"Above all therefore, and especially for boys, a dry master is to be avoided, not less than a dry soil void of all moisture for plants that are still tender. Under the influence of such a tutor they at once become dwarfish; . . . while they think it sufficient to be free from fault, they fall into the fault of being free from all merit. Let not even maturity itself therefore come too fast."[83]

The principle for guiding correction of exercises with reference to different ages is well indicated in passages quoted on earlier pages.[84]

(c) Care, not haste, is the desideratum in this work of composition.

(d) Poetical narrative came in the previous school; now comes historical narrative, which has, he says, more of truth, more of sub-

[79] II, 8: 6–10. Compare this with Cicero's view as to the relative worth of genius and diligence,— De Or. II, 35.

[80] Note also that Quintilian lays stress on culture and emphasizes practice. His book is full of passages suggesting these things.

[81] II, 4: 1.

[82] II, 4: 4, 5.

[83] II, 4: 7–8.

[84] I, 3: 6; II, 4: 12 ff. See also II, 6: 4 ff.

stance. Good grading is a part of good method, and Quintilian is strong here as elsewhere. From simple narrative he proceeds through various stages of argumentative and judicial writing, including briefs, much of it of a simple type, to be compared with the average high school senior's efforts of the present day. The work requires close study and very definite training. That a considerable part of it is elementary and preparatory will be seen in this significant passage, which occurs in connection with his description of the first stage of writing: —

"There will be a proper time," he says, "for acquiring facility of speech; . . . but in the mean time it will be sufficient, if a boy with all his care and with the utmost application of which his age is capable, can write something tolerable. To this practice let him accustom himself and make it natural to him. He only will succeed in attaining the eminence at which we aim, or the point next below it, who shall learn to speak correctly before he learns to speak rapidly." [85]

Perfection of style is not the object at this stage.

With writing is to go practice in the oral reading of history and speeches, with a careful study of passages from the points of view of language, rhetoric, and literature. Quintilian thinks the teacher would contribute much to the advancement of pupils,

"if, as the explanation of poets is required from teachers of grammar, so he (the rhetoric teacher) in like manner would exercise the pupils under his care in the reading of history, and even still more in that of speeches." But long custom, he tells us, has established a different mode of teaching. For himself, however, he says, and this is an indication of the greatness of the man, "though I should make a new discovery ever so late, I should not be ashamed to recommend it for the future." [86]

(e) What Quintilian advises in the study of the selections is finely indicated in the following passages: —[87]

"But to point out the beauties of authors and, if occasion ever presents itself, their faults, is eminently consistent with that profession and engagement by which he (the teacher of rhetoric) offers himself to the public as a master of eloquence, especially as I do not require such toil from teachers that they should call their pupils to their lap and labor at the reading of whatever book each of them may fancy. For to me it seems easier as well as more advantageous that the master, after calling for silence, should appoint some one pupil to read, (and it will be best that this duty should be imposed on them in turns), that they may thus accustom themselves to clear pronunciation; and then, after explaining the cause for which the oration was composed, (for so that which is said will be better understood), that he should leave nothing unnoticed which is important to be remarked, either in thought or language, or in argument and rhetorical features for forensic purposes."

[85] II, 4: 15–17.
[86] II, 5.
[87] II, 5: 5 ff.

"In regard to style, he should notice any expression that is peculiarly appropriate, elegant, or sublime; when the amplification deserves praise; what quality is opposed to it; what phrases are happily metaphorical, what figures of speech are used, what part of the composition is smooth and polished, and yet manly and vigorous."

"Nor will the preceptor be under obligation merely to teach these things, but frequently to ask questions upon them, and try the judgment of his pupils. Thus carelessness will not come upon them while they listen, nor will the instructions that shall be given fail to enter their ears; and they will at the same time be conducted to the end which is sought in this exercise, namely that they themselves may conceive and understand."

This is a lesson in rhetoric, as well as in literature and composition. It is concrete, correlated rhetoric,—rhetoric of the best and most educative sort, because it shows it in its natural environment, is practical, not theoretical. Quintilian well says,—

"I venture to say that this sort of diligent exercise will contribute more to the improvement of students than all the treatises of all the rhetoricians that ever wrote; which doubtless, however, are of considerable use, but their scope is more general; and how indeed can they go into all kinds of questions that arise almost every day? . . . In almost every art precepts are of much less avail than practical experiments." [88]

Here again, then, Quintilian, true to his principles, provides for a study of literature as an essential part of his method, which includes imitation, practice, and the exercise of judgment for the purpose of modifying, adapting, adding to, and even exceeding, one's models. He shows his practical bent and sound judgment, which are everywhere manifest in his book, by advising the best authors from the beginning:

"I would choose the clearest in style and most intelligible, recommending Livy, for instance, to be read by boys, rather than Sallust, who, however, is the greater historian."

Pupils at this age are more likely to look at externals; hence the need of intelligent care in selecting. As to style, he recommends, for early years till tastes are formed, something between the crudeness and dryness of early writers and the florid style of some of the later ones. When the danger period is past, however, he recommends them

"to read not only the ancients (from whom, if a solid and manly force of thought be adopted, while the rust of a rude age is cleared off, our present style will receive additional grace), but also the writers of the present day, in whom there is much merit." The latter must be selected with care. "Who they are is not for everybody to decide. We may even err with greater safety in regard to the ancients; and I would therefore defer the reading of the moderns, that imitation may not go before judgment." [89]

[88] II, 5: 14. [89] II, 5: 19 ff.

(f) To return to writing, there are two general modes of procedure in giving the training in this work that forms his chief means for developing the orator: 1. Directions with illustrations by the master before writing; 2, directions (outlines) before writing, with additions and emendations after the writing. He believes that both modes have advantages but he thinks that,

"if it should be necessary to follow only one of the two, it will be of greater service to point out the right way first than to recall those who have gone astray from their errors." [90]

(g) Quintilian deals very discriminatingly with "rules." The pupil is to be a thorough master of principles and details. But rules must not be abused. Care must be exercised not to make them an end. Judgment and proportion are to influence in the matter. Principles must become a part of one's own nature, and one must consult his own personality apart from instruction and rules.[91]

"He must exert his own powers and acquire his own method; he must not merely look to principles, but must have them in readiness to act upon them, not as if they had been taught him, but as if they had been born in him. For art can easily show a way, if there be one; but art has done its duty when it sets the resources of eloquence before us; it is for us to know how to use them." [92]

Practice is to make a kind of intuition for work that will obviate constant reference to rules.

One of Quintilian's most striking passages, in which he criticises some of the education of his day (easily paralleled in modern, and even in present-day education), puts the matter very clearly: —

"In the meantime I would not have young men think themselves sufficiently accomplished, if they have learned by heart some of those little books on rhetoric which have been handed about. The art of speaking depends on great labor, constant study, varied exercise, repeated trials, the deepest sagacity, and the readiest judgment. But it is assisted by rules, provided that they point out a fair road and not a single wheel rut, from which he who thinks it unlawful to decline must be contented with the slow progress of those who walk on ropes. . . . The work of eloquence is extensive and of infinite variety, presenting something new almost daily; nor will all that is possible ever have been said about it." [93]

(h) Akin to this, but from a slightly different direction, is his statement as to the relative importance of some of the elements of

[90] II, 6: 2–6.

[91] II, 13; VIII, Introd., 28; VII, 10: 14. Order, judgment, method are three favorite general rules; but he is not speaking of rules of this kind. See also page 153.

[92] VII, 10: 14, 15.

[93] II, 13: 15–17.

oratory. He recommends, as already noted, "care about words, and the utmost care about matter."[94] He seems to imply that there is a tendency to emphasize *words* too much and to neglect *things* that he makes the foundation.

"The best words generally attach themselves to our subject, and show themselves by their own light. . . . They are to be found close to the subject. . . . The best expressions are such as are least far-fetched and have an air of simplicity, appearing to spring from truth itself."[95]

In keeping with this is the caution that sentiments spring from the subjects themselves and cannot be manufactured beforehand, as some seem to think.

(i) But though Quintilian lays particular stress upon the fundamental elements, and upon the simple and practical in oratorical training, it must not be supposed that he was averse to embellishment, as some passages might seem to indicate. Quintilian paid due attention to ornament. Even in the statement of facts, which might seem as prosy as anything, he says:

"I think that the statement of fact requires, as much as any part of the speech, to be adorned with all the attractions and grace of which it is susceptible," and the manner of presentation must vary with the case.[96]

One can easily detect a Quintilian touch in Webster's presentation of a case, by comparing some of the latter's language with some of Quintilian's directions.

5. There is to be a vigorous preparation for the Forum. Quintilian finds the present exercises in the schools tame and weak. He would have his pupil

"aspire to victory in these schools, and learn to strike at the vital parts of his adversary and to protect his own. Let the preceptor exact such manly exercise above all things and bestow the highest commendation on it when it is displayed."

Another criticism of the schools is found in the suggestion that school training, as practiced, is too confining, that there is minute and careful training, but that it tends to fix in certain lines that affect one badly when the actual test comes.[97]

A similar thought is enforced in several passages in which he contends that formal training is not the sum of preparation for the orator, that training must be real and vital, brought into close touch with life. One must try the Forum, even while a pupil. Writing is the "great modeler of excellence" in the orator, but another step is necessary to reach the end. Power to speak crowns the efforts of a teacher.[98]

[94] VIII, Introd., 20.
[95] VIII, Introd., 21–23.
[96] IV, 2:116.
[97] II, 10; V, 12:22.
[98] X, 1:3.

It was customary for pupils to learn by heart what they had composed and repeat it on a certain day. Quintilian disapproves of this, for "proficiency depends chiefly on the diligent cultivation of style." In committing and declamation he recommends "select passages from orations and histories, or any other sort of writing deserving of attention." This provides for memory work, supplies models of the best compositions that will work silently in forming style, and gives command of a fine vocabulary (a three-fold one, consisting of words, phrases, figures) that will offer itself spontaneously in future work.[99] But he also provides for declaiming one's own compositions occasionally, and so shows his good pedagogy by appealing to adolescent qualities.[1]

Declamation is "the most recently invented of all exercises and by far the most useful. For it comprehends within itself all those exercises of which I have been treating and presents us with a very close resemblance to reality."

But he tells us that the exercise has degenerated and so has been one of the chief agencies that have corrupted eloquence. He would bring it back to its possibilities.[2]

Some principles of method for the final stage of training.— The boy now "knows how to invent and arrange his matter" and "has also acquired the art of selecting and disposing his words." Quintilian would next instruct him "by what means he may be able to practice in the best and easiest possible manner that which he has learned."[3] Here begins the final instalment of his training in the art of oratory. This may perhaps be regarded as the post-secondary part of his School of Rhetoric. Once again following his spiral system he recurs to his three-fold division of work and brings the spiral one turn further up. Here are some of his points: —

(a) Constant reading of standard literature for a more critical study of models, in order to develop expression and style.

"For a long time none but the best authors must be read and such as are least likely to mislead him who trusts them, and they must be read. . . almost with as much care as if we were transcribing them."[4]

"While we receive all language first of all by the ear,"[5] he thinks there is special value in reading and digesting carefully, as it gives a more deliberative mastery of language. This critical study of literature is to give, first, words,[6]— not merely vocabulary, but facility in adapting words to situations,— then expression and style. He lays special stress on argumentative style, but not narrowly, as seen by the wide range of his literature course.

[99] II, 7:4.
[1] II, 7:5.
[2] II, 10.
[3] X, 1:4.
[4] X, 1:20.
[5] X, 1:10.
[6] X, 1:6 ff.

In this connection comes in again his fundamental psychological principle, imitation, broadly interpreted.

(b) Development of judgment and initiative, which Quintilian presents with striking force. Here we have his final school work for developing individuality.

(c) Constant practice in writing, following a carefully graded course.[7]

(d) As writing is the key to excellence his further pedagogical observations on the subject will be of interest. First then we note some general principles: —

1. "By writing quickly we are not brought to write well. By writing well we are brought to write quickly."[8]

2. "Let our pen be at first slow, provided that it be accurate. Let us search for what is best and not allow ourselves to be readily pleased with whatever presents itself. Let judgment be applied to our thoughts, and skill in arrangement to such of them as the judgment sanctions. . . . The weight of each (word) must be carefully estimated, and then must follow the art of collocation; and the rhythm of our phrases must be tried in every possible way, since any word must not take its position just as it offers itself."[9]

3. Practice and method assist in giving readiness. Method is working according to the nature of the subject, nature of the characters concerned, disposition of the judge, and requirements of the occasion.[10]

4. "I consider that the greatest facility in composition is acquired by exercise in the simplest subjects. . . . But the great proof of power is to expand what is naturally contracted, to amplify what is little, to give variety to things that are similar, and attraction to such as are obvious, and to say with effect much on little."[11]

Quintilian also gives some interesting suggestions as to means, conditions, environment, and mechanics of writing.

1. He suggests practice in translation and similar exercises as definitely helpful for his main object, (a) translation from Greek into Latin for matter and art, in which Greek excels. Such an exercise assures, he believes, better choice of words and secures figures for ornament, "because the Roman tongue differs greatly from that of the Greeks."[12] But Latin excels Greek in certain things, and its real genius is to be brought out. (b) He would have his pupil convert Latin into other words. (c) He recommends turning poetry into prose for ele-

[7] See X, 3: 13. For grading conf. X, 5, where Quintilian gives some very interesting suggestions. Order of development is seen in his statement that power comes first by speaking, next by imitation, and last by "diligent exercise in writing." "But, . . . as our work proceeds, those things that were of the greatest importance begin to appear of the least." X, 1: 3, 4.

[8] X, 3: 10.

[9] X, 3: 5.

[10] X, 3: 15.

[11] X, 5: 10, 11.

[12] X, 5: 2, 3.

vation of style, for training in exactness, through getting at the real prose equivalent, and for general broadening of expression by comparing the two languages and studying expression-rivalry between them.[13] (d) Paraphrasing Latin orations helps in gaining language power, encourages care in study and writing, and stimulates ambition to excel the original.[14] (e) "It will be serviceable also to vary our own (language) in a number of different forms, taking certain thoughts for the purpose and putting them as harmoniously as possible into different shapes."[15]

2. He makes several practical suggestions as to the method of writing.

(a) He would have one be his own amanuensis, because it gives better conditions for thinking with some deliberation. In the case of dictating, with a rapid amanuensis it tends to bring haste and carelessness in composing, while with a slow amanuensis it obstructs the course of thought and dispels its fire. Besides, it destroys the privacy needed for vivid thinking.[16]

(b) He would avoid running through the subject and getting a rough copy and then revising. Better use care at the outset and then polish, he thinks.[17]

(c) For better connection repeat the last words of what has just been written;

"for besides that by this means what follows is better connected with what precedes, the ardor of thought that has cooled by the delay of writing receives its strength anew, and, by going again over the ground, acquires new force."[18]

(d) As to environment, the best condition for writing by day is not retirement amid nature's charms, which are diverting, but Demosthenes' secluded place, "where no voice can be heard and no prospect contemplated";—at night a closed chamber with "the silence of the night . . . and a single light for company." But one must also accustom himself to "set all interruptions at defiance" and must be able to secure a kind of privacy for thought anywhere.[19]

(e) There are certain principles for correction which he likes:—(a) After the writing is done lay away the copy. (b) Do not correct too much. There are some, he says,

"who return to whatever they compose as if they presumed it to be incorrect, and as if nothing can be right that has presented itself first; they think whatever is different from it is better and find something to correct as often as they take up their manuscript, like surgeons who make an incision even in sound places; and hence it happens that their writings are, so to speak, scarred and bloodless and rendered

[13] X, 5:4.
[14] X, 5:5 ff.
[15] X, 5:9.
[16] X, 3:19.
[17] X, 3:17, 18.
[18] X, 3:6.
[19] X, 3:22 ff.

worse by the remedies applied. Let what we write therefore sometimes please, or at least content us, that the file may polish our work and not wear it away to nothing." Again he says, "Nor do I think that those who have acquired some power in the use of the pen should be chained down to the unhappy task of perpetually finding fault with themselves." [20]

(f) Quintilian also brings in some details of an external nature.[21] (a) He advises writing on wax-tablets, for ease in erasing and for quickness (unless eyes require parchment), and he suggests that some leaves be left blank and that some space be left vacant for jotting down odd thoughts that may occur to us on other subjects (which reminds us of De Quincey's method of writing). (b) Again the pupil's tablets should not be too broad, "having found a youth," he says, "otherwise anxious to excel, make his compositions of too great a length, because he used to measure them by the number of lines," and the fault could not be corrected without altering the size of his tablets. The modern teacher often finds length usurping the place of substance.

3. **Speaking. The Forum.**— But writing is not enough. There must be speaking, if the orator is to have the needed practical training. So Quintilian emphasizes a new series of declamations "made similar to actual pleadings." [22] The student must come to real life; reality tells. In addition to what he has already provided in declamations the young aspirant is to choose an orator and attend on him carefully. He is to be present at as many trials as possible. He is to set down real cases in writing and to handle both sides of the question.

"The young man will thus be sooner qualified for the Forum whom his master has obliged to approach in his declamation as nearly as possible to reality and to range through all sorts of cases." [23]

4. The pupil is now well on the way to extempore speaking, which represents the highest degree of oratorical power. But there is an intermediate step between his present status and that. "Next to writing is meditation," *i.e.*, thinking a matter out instead of writing it, to be followed by speaking. But much practice in writing gives "a certain *form* of thinking . . . that may be continually attendant on our meditations." A *habit* of thinking must be gradually gained by a method like that noted in his treatment of memory. The student is to gain such latitude in meditated speaking that he will not be chained to a fixed scheme, but will be able to incorporate a "happy conception of the moment" without confusing his plans.[24]

Extempore speaking is the final field of effort for the orator, who must have power to meet sudden calls where preparation is impossible. Quintilian continues his description of the course of training for this final end with the same masterly detail found throughout his work. We may sum it up by saying that by study, art, and practice

[20] X, 3:10; X, 4:3.
[21] X, 3:31–3.
[22] X, 5:14.
[23] X, 5:19 ff.
[24] X, 6.

a kind of intuitive method in speaking is developed to relieve the mind of pressure and allow it to expend its force constructively so that,

"while we are uttering what is immediately present to our thoughts, we may be arranging what is to follow, . . . and our prospect may advance no less than our step,"— a power "such as that by which the hand runs on in writing and by which the eye in reading sees several lines with their turns and transitions at once, and perceives what follows before the voice has uttered what precedes." [25]

But notwithstanding his regard for extempore speaking he remarks significantly that he would never wish, for his own part, to have such confidence in his readiness to speak

"as not to take at least a short time, which may almost always be had, to consider what he is going to say. . . . We must study at all times and in all places; for there is scarcely a single one of our days so occupied that some profitable attention may not be hastily devoted, during at least some portion of it, . . . to writing or reading or speaking." [26]

In connection with speaking Quintilian expresses his "full approbation of short notes and of small memorandum books which may be held in hand." But he disapproves of written summaries as likely to weaken memory power. He forgets nothing.[27]

It will be fitting to close this summary with two very pertinent and admirable suggestions of Quintilian that show the man: —

1. "No portion even of our common conversation should ever be careless. . . . Whatever we say, and wherever we say it, should be as far as possible excellent in its kind."
2. "As to writing, we must certainly never write more than when we have to speak much extempore; for by the use of the pen a weightiness will be preserved in our matter, and that light facility of language, which swims as it were on the surface, will be compressed into a body." [28]

Good advice for modern language teachers.

The two final books, which need not concern us in detail here, give emphasis to "delivery" and the training by which it may be attained, and to the higher studies of the orator,— the professional side of his work,— and his psychological and philosophical studies.— They take up also a discussion of different styles of oratory and a characterization of prominent orators.

Quintilian has given us an enterprising course of training, broad, strong, thorough, and illuminated with a wealth of detail and illustration. His great pedagogical treatise has left its impress on all succeeding centuries.

Brief outlines and a table of comparisons follow.

[25] X, 7.
[26] X, 7: 20, 27.
[27] X, 7: 31, 32.
[28] X, 7: 28.

TOPICS AND REFERENCES.— CICERO'S DE ORATORE.

Education as conceived by Cicero. (General treatment—Omits elementary education)

1. Aim: — Complete Orator: — I: 8, 26 f; III: 22.
2. Analysis of Complete Orator.
   (1) Character necessary.— II: 20, 43, 82; III: 14, 18.
   (2) Wise, educated, cultured man. Language power and memory enforced: — I: 2, 5, 6, 8, 11–16, 25, 26, 28, 32, 34, 36; II: 1, 2, 8, 9, 15, 16, 23, 25, 27, 51; III: 13, 14, 19, 20, 25, 31 f., 35, 49 f., 51.
   (3) An appreciation of relations of life and disposition to throw himself into the circumstances and exigencies of life, public, and private: — I: 10, 11; II: 9, 16; III: 17.
   (4) Special and technical qualities of orator needed: — capacity to make word meet time, occasion, person, subject matter. Master in public debate and private conversation — I: 5, 8, 12, 21, 28, 31, 34; II: 25, 27, 31–2, 58 f., 79; III: 11, 12, 14, 45 f., 49 f., 51, 56 f.
   (5) Judgment, self-control, confidence. Dignified, yet approachable; cosmopolitan, yet incisively Roman. Individuality.

   Summary: Liberally trained man and professionally trained man combined, each brought to highest perfection.
3. Relations of orator.
   (1) Personal ascendency: — I: 4, 8, 33; II: 8. Brutus 15, 54.
   (2) Public interests, etc.: — I: 8, 9, 11, 36; II: 9, 16; III: 1–2, 17.
4. Subject matter for training. No systematic treatment. (Grouping of scattered statements.)
   (1) Language,— vocabulary, grammar, rhetoric, composition: — I: 5, 12, 21, 31, 32, 33, 34; II: 23, (38); III: 7, 9, 10, 11, 13, 14, 19, 25 f., 44 f., 49, 51. All linguistic elements.
   (2) Literature (formal value; culture value): — I: 5, 28, 34; III: 10, 13.
   (3) Philosophy and practical psychology (emotions): — I: 3, 5, 12 14, 15, 28, 51, 52; II: 81; III: 35.
   (4) Law,— civil and general: — I: 5, 11, 14, 15, 28, 34.
   (5) Music: — II: 8; III: 44 f.
   (6) History: — I: 5, 34; II: 15.
   (7) Mathematics: — I: 14; II: 15.
   (8) Military affairs and politics: — I: 11, 14, 15, 34.
   (9) Delivery (all elements): — I: 5, 28, 31; II: 45; III: 11, 12, 49 f., 56 f.
   (10) Everything within range of human intelligence: — I: 4, 5, 6, 16, 34; II: 1, 2, 15, 16.
5. Pedagogical principles and method: — (General and unscientific.)
   a. General pedagogical principles: —
      (1) Relation of art to power. Helpful, but subordinate to talent: — I: 23, 32; II: 3, 7, 35; Relation of talent, art and diligence. Diligence supreme, II: 35.
      (2) Careful attention to individual: — II: 20; III: 9.
      (3) Inadvisable to separate training in thought power, etc., from training in delivery and rhetoric: — III: 6, 15 ff., 19, 20.

(4) Anti-specialization: — III: 5, 6, 33.
(5) Roman traditions desired: — I: 6.

b. Special principles guiding method: —

(1) Talent (relation to education): — I: 25, 28, 32; II: 7, 35.
(2) Imitation: — II: 21, 22, 23.
(3) Memory training, (memory-storehouse). Practice; mnemonics: — I: 5, 34; II: 86–88.
(4) Relation of literature to education: —
  a. Subject matter for imitation and absorption: — I: 21, 34; III: 10, 19.
  b. Training value (read, turn over, praise, censure, interpret, correct, refute): — I: 34.
(5) Composition (writing most excellent modeller and teacher of oratory): — I: 21, 33, 34; II: 23; III: 44 f., 52.
(6) Value of translation. I: 34.
(7) Generalization needed. "Common places," etc. II: 16, 27, 30, 31, 32, 34, 41; III: 30.
(8) Ability to see and discuss both sides: — I: 34.
(9) Extempore work subordinate to deliberate preparation and dependent on it: — I: 33.
(10) Humor: — II: 54 ff.
(11) Practice, drill,— key to all efficiency: — I: 4, 32, 33, 34; II: 20, 21, 22, 23, 24, 27, 35.

All studies taught from practical standpoint.

Summary: — Main principles of method,— talent, imitation, habit, memory, practice; *formal training.*

Agents of Education:

Parents and nurse (correct form of speech). Some training from specialists; some from familiar converse; some from practical observation (Forum). Some from foreign travel and study, if possible.

In his Brutus Cicero shows with enthusiasm his training from the age of 16,— attending the Forum; studying hard (reading, writing, private declamation); pursuing the studies of philosophy and logic; taking rhetorical instruction under Molo, the principles of jurisprudence under Scaevola; trying his abilities by undertaking at an early age the "management of causes, both public and private"; foreign travel with renewed study of philosophy and oratory; contact with and training under the most distinguished orators of Asia. His earnestness in study may be seen from a statement made in the midst of his description of his course of training: —"In the meanwhile I pursued my studies of every kind day and night with unremitting application." Brutus, LXXXIX–XCL.

Here is one of his fundamental principles in work: —

"Since then in speaking three things are requisite in finding argument, genius, method. . . . and diligence, I cannot but assign the chief place to genius, but diligence can raise even genius itself out of dullness. . . . It is capable of effecting almost everything. . . . Art only shows you where to look and where that lies which you want to find; all the rest depends on care, attention, consideration, vigilance, assiduity, industry, all which I include in that one word that I have so often repeated, diligence, a single virtue in which all other virtues are comprehended." De Or., II, 35.

APPENDIX III

Tabular Summary

I. Roman Ideals in Education — Quintilian.

Aim

Perfect Orator,
High Character,
Liberally educated,
Professionally trained,
Working for (state, general public), and himself.
Practical Ideal. (Oratory end in itself)

II. Subject matter — Curriculum.

(*Age Limits Indefinite.*)

Curriculum described in great detail. See preceding appendix.

Ante-school period: —
- Language — 1. Greek. 2. Latin.
- Writing.
- General information.
- Ethics.

Elementary school period: —
- Language — *Writing* — Number (?)
- Composition, elementary.
- General information.
- Ethics.

Grammar school period: —
- Grammatics: —
  1. Art of speaking and writing correctly.
  2. Literature (culture-value; formal value). Many sided study.
  3. Very abstract study of intricacies of grammar.
- Elementary composition.
- Elementary Rhetoric. Elementary Elocution. Music. Arithmetic. Geometry. Astronomy.
- Delivery (elementary).

Higher School:
- Advanced composition (style; elaboration).
- Wide course in literature.
- Philosophy,— physics, ethics, dialectic. Mnemonics. Delivery.

(All learning)

METHOD

Talent
Individual attention
Interest
Imitation
Habit
Memory,— information storing.
Objective work. Much concreteness.
Rules + practice based on imitation.
Correlation prominent.
Generalization power developed.
Development of initiative.
Most prominent elements of method: —

Practice and *drill*.— *Formal Discipline.*
Exercises for developing initiative.
Writing,— composition,— the chief instrument of training.
Discipline
- Mild
- Firm
- Wise

Teacher + Pupil
Choice of teachers and attendants made much of. Teacher the best part of method.
Public Schools preferred.

X

JESUS, TEACHER — NEW PRINCIPLES OF EDUCATION

Decadence of Roman schools. New aims needed.—As indicated in the last chapter, the old Roman schools, which continued vigorous longest in Gaul, soon lost their life, because they lost their vital relations with the life of the Empire. Freedom was gone. The opportunity for individual initiative had passed, and there came what always must come when the individual and individual responsibility are sunk in large aggregations,— decadence. In education, as already noted, linguistics occupied the field, and they became an end in themselves. Thus *form* ruled, and decadence naturally came here, as in the Empire at large. Education needed re-objectifying in order to recover its life; some new and vital touch with the world must be found, and language as the supreme element in education, according to Roman pedagogy, must find something to do and something worth doing, if it was to regain its vitality. It had not long to wait. A new order of life and thought with new aims and new view-points was forming, which eventually gave infinite scope to old elements of education and suggested new elements.

A new religious and educational force.— In the eighth century of Rome and the twentieth of Israel, according to traditional chronology, just as the ancient schools, typified by those of Greece and Rome, had reached their zenith in organization and efficiency, a new force that was simply a new view of life came into the world. It appeared suddenly, for it was so unlike its surroundings that its appearance was like an unheralded event. Of course we can see a slow evolution toward this supreme moment, and a few at that time were not unprepared for it; but for the world at large it was far otherwise. The new force was Christianity, not a new religion, but

a new phase of religion. It was to revolutionize education. Its principles were to make a new pedagogy.

It will contribute toward an appreciation of its force and its power of growth to note the circumstances that surrounded its advent and the fundamental idea that characterized it. At any rate it will be interesting and suggestive to do this.

Circumstances surrounding its advent.— The Roman Empire was at its best. It was passing through the happiest, most buoyant, most hopeful period that it saw in its long history. With its conquered world organized with a matchless system that became the model for all succeeding centuries, both in state and in church, it was enjoying a peace that is aptly described as golden.

> "No war or battle's sound
> Was heard the world around;
> The idle spear and shield were high up-hung."

There were no circumstances distraught and distressing that urged men's minds to seek new faith and new religious ideas for solace and deliverance. There was abundant leisure for new study, it is true, and a new religious form was a curiosity to be examined with interest and to be discussed like any other curious phenomenon, and perhaps to win some signs of adherence. The religion of Jesus, however, was apparently too humble and suggested too much self-forgetfulness, too much subordination of self to one's work, to influence the educated and the leaders.

On the other hand, the proud peoples that had been subdued by Roman arms were looking for deliverance, for a liberator who should bring them back to their pristine vigor and restore their autonomy. Of these proud peoples the Hebrews were the proudest. But while they were looking for a new order their very ambition made them scrutinize the ideas and methods of any would-be leader with a discrimination and intensity that were very natural, though they have been misunderstood. If the new ideas did not square literally with national aspirations they had no chance of being accepted readily. Strong preconceptions absolutely forbade a spiritual interpretation of the nation's destiny. A politically restored Israel, a new

realization of a great people's prestige, a new opportunity to develop initiative were aims held with an intensity we are in no danger of overestimating. New religious ideals had little chance in these conditions.

The very constitution of the Roman world, conquerors and conquered, was thus distinctly unfavorable for any rapid conquests by the ideals of Jesus. The new ideas must win by their own inherent force and by a gradual and cumulative process.

Two fundamental characteristics.— The two fundamental characteristics of the "new religion" that disclose at once its inherent strength, its genius, and its method, by which it has won its way from that time to this, are its simple reasonableness and its appeal to the individual. It aimed first of all at individuals, not at masses. Its real mission was to rouse individual thought and initiative. Each individual was thus a vital force, and the cumulative effect was a multitude of forces banded in a great movement that was finally resistless. First a few Israelites; then a few Romans and Greeks; numbers grew at first slowly, then rapidly. But in it all the method was first and chiefly individual.

Pedagogy of the Gospels.— All this however does not really explain the influence and power of the new leader. To understand his genius we need to study his personal attitudes and relationships and his principles of work. In other words we must study the pedagogy of the Gospels, the foundation of all modern pedagogy.[1]

[1] A brief résumé of a larger and more detailed study. It is based on a collation of more than four hundred teaching episodes of Jesus. References are made to all the Gospels, but chiefly to the three Synoptics that represent Jesus in the concrete. This is a natural rather than a studied plan. It will be noted that these references are sufficient to illustrate the points. Allusions to the Gospel that bears the name of John support and add to the others. This is true whether we are to believe that, with dramatic instinct and in Thucydidean spirit, words supporting the central fact of Jesus, which the writer was trying to express in the fourth Gospel, are placed in the mouth of the great Teacher, or whether episodes in His life not gathered by others, but perhaps found in the numerous Christian Gospels current at the time and ascribed to the Apostles, have been culled and used by this later writer. (Conf. "What I believe and Why," by W. H. Ward, in Independent, 81 : 207.) *We are here studying simply the Teacher.*

Jesus preëminently a teacher.— Jesus of Nazareth was *preëminently* a *teacher*. This was appropriately so for two reasons. First, a new ideal of life, a new type of religion, a new philosophy, if you will, were to be incorporated into the life of the world, to become vital elements in both individual and civic thought and action. This required the function of teaching more than that of preaching; for the many-sided training needed to make the new a real part of the world's forces comes of slow, patient, resourceful teaching, rather than of the swifter, briefer and more intermittent action of preaching. Second, the new required supporters, specially trained men, intimate with the author and expounder of the new, devoted to Him, and capable of continuing the tradition of His life and principles. Such agents are the products of teaching. So both the general ends to be attained and the special means for furthering the ends suggested the teacher. The attitude of Jesus was that of the teacher in almost every episode we recall in His life. It is true that in a few cases we seem to have a discourse, but this is not inconsistent with good teaching under proper conditions, and in the most conspicuous case, the Sermon on the Mount, "His disciples came unto Him," which of itself implies teaching.

His principles.— The principles taught by this marvelous teacher, or implied in His teaching, were capable of revolutionizing education. His method of teaching and His teaching qualities were new and striking, involving, for those who could interpret them, a complete change in pedagogy.

It is sufficient here to outline these matters briefly, as the aim is not to analyze exhaustively the pedagogy of the Gospels, but merely to suggest certain points that would naturally affect education of that day and of succeeding days. We should formulate then these two general principles as the most important in this connection: —

1. There is *no hierarchy of souls.* All things are open to all.[2] Education, which has hitherto been for the few, is now

[2] His teaching relations had infinite range. Doctors in the temple at Jerusalem (Luke 2:46), and the multitude in nature's temple by the sea (Mark 4); judge and ruler (Mark 5:22, John 18:36 ff.), and the outcast subject (Mark 23:39 ff.); high ruler of the synagogue (John 3), and despised alien (Luke 19, John 4); strong, reasoning rabbi,

in all its grades to be the prerogative of all who will. The record teems with instances in which He was approached by all classes and conditions of men, or in which His masterful spirit went out spontaneously to meet special educational needs. There is not a single instance in which any one who took even a half-hearted learning attitude went away empty.

2. There is *no restriction in means.*[3] Each is to receive that which is most needed to educate him for the Kingdom of God, which was the supreme end, and which, duly interpreted, is to-day regarded as the supreme end everywhere. Two things are involved here: — 1. There is *infinite scope for the curriculum.* To the old abstract studies others of a different nature are inevitably to be added, if the principle is to maintain its vitality. The spirit of the Gospels would welcome the best everywhere, but in union with the supreme end that has just been referred to. 2. Outside of certain general principles, there are no hard and fast lines of method that each must follow. Christ suited His material and His manner of using it to the mind with which He had to deal. Thus individual teaching was involved. This idea was not perhaps absolutely new, but it was presented so vividly and with so many prac-

(Luke 10:25 ff.; Matt. 22:34 ff.), and the defective youth (Matt. 17:14 ff.); orthodox (Matt. 15; Mark 12), and heterodox (Mark 12:18 ff.); rich young man (Matt. 19:16 ff.), and blind beggar (Mark 10:46 ff.); familiar friends (John 11; Luke 10:38 ff.), and strangers broadcast (Matt. 11:7; Luke 6:17; John 12:20); the mature man (Mark 9:17 ff.; John 3), and the little child (Mark 10:3),— all received His definite attention and teaching influence.

As to quotations from John here and elsewhere see note 1.

[3] The passages quoted in the last note indicate a wide range of means. Jesus approached the matter to be taught in various ways. For method and illustrations He drew from the Book of Law and the Book of Nature, (Mark 12; John 5; Luke 6); from past and present, remote and near (Mark 2:23; 12:41 ff.; Luke 4:16 ff.; 13, 14, 15, 16); from the abstract and the concrete (Matt. 5, 6, 7; Mark 4; John 14, 15); from books and from persons and things, (Luke 4, 6, 13, 17; Matt. 21:16; Mark 12; John 10). He impressed by swift sentences and by careful exposition, (note the condensed epigrammatic beatitudes, which by their very form win attention, and compare them with the ultra-concrete teaching of Luke 18 and the expository method of Luke 8); by metaphor, parable, allegory, and choice illustrations; (Matt. 5, 13, 6:22, 13, 21; Luke 10; John 10); and especially by applying everyday matters and incidents that were easily grasped and were calculated to clear away any mystery or mysticism, (Matt. 13:33 ff.; Mark 12:42 ff.).

tical applications that it was essentially new. There was thus *infinite scope also for method.*

Qualities of the teacher.— Coming now to the characteristics of the teacher and his method in greater detail, these qualities stand out: —

1. **Personal Power.**— *Power* that comes from conscious union with the highest in the universe, so that the two become one indivisible working force.[4] This gives inspiration. As an element in teaching it makes a trinity of teaching power, the teacher, God, the pupil being united in the process. There is a reaching out on one's own level to serve human interests, and a reaching up. This is a right angle of forces, and the resultant is the diagonal that takes the teacher, his service, and the objects of his service to a plane above the dead level. High aims and high endeavor result. This combination is characteristic of all the best teaching the world has seen. Called by different names, perhaps, looked at in different ways, it is the same thing fundamentally, akin to the spiritual union of the Great Teacher and God that is emphasized in the Gospels. Drop this element in teaching and we sink to the most perfunctory and mediocre work.

2. **Knowedge.**— *Absolute command of the matter* to be taught.[5] Christ knew Jewish life, literature and tradition. Historical allusions were at His command to illustrate His points. As compared with those who were supposed to be absolute in their mastery of these things He easily showed that His knowledge was deeper, broader, keener, and hence richer, than that of any of them. He could outquote any as far as concerned accuracy of insight into His quotation, and thus as

[4] Matt. 6, 11:25, 12; Luke 10:21; John 1:51, 4, 5, 8, 14:20, 16:32; *et passim.* Note the spirit and confidence of intimate cooperation as shown in Matt. 11, John 10, and the sublime homing feeling, instinct with inspiration, that is inherent in the always beautiful "Our Father," (Matt. 6), and My Father's house, (John 14).

[5] Matt. 5, 12, 15, 19, 22; Luke 11, 13, 14, 15, 17; *et passim.*

No passages better illustrate His commanding knowledge and insight than Matt. 5 and 6, where He repeatedly quotes ("Ye have heard how it hath been said," etc.), and immediately illumines the quotation by the most appreciative interpretation, "But I say unto you, love your enemies," etc. Compare also His absolute mastery of the spirit and letter of the great Book of Knowledge in silencing the superficial argument of a sect (Matt. 22).

far as concerned a just estimate of values in quotation. He could quote more aptly, because He not only knew more fully the points at issue, but saw more clearly the real significance of the words He used. No surface application, no quibbling would He countenance. He immeasurably supassed the Jewish masters in their own specialty. His power to relate a bit of learning to the great whole of life broadened and supported His knowledge, so that the narrow application faded before the larger one (see Mark 10). This sweep of vision placed Him beyond the bounds of the ordinary quoter whom He met.

In this connection it is interesting to note that He was a student of marked ability. Among the very few references to His early life two deal with this side of His nature. 1. He studied and discussed with doctors. 2. He "increased in wisdom" as He increased in stature. We may infer that He gained much from quiet thought and reflection. He got at the real heart of things. In all this He was a model for teachers, though in much of it He has had few followers.

3. **Insight into men and things.**— He had an *equally wonderful knowledge of men and things,*[6]— insight we might better call it. He appreciated the condition in which He found a pupil and built on the pupil's power and interests from the point He had already reached, and thus built confidently and unerringly. The value of this knowledge of the human subject, in addition to that of the culture subject, has been largely neglected, or recognized in a dilettante and partial manner. The matter has received more attention in recent years and is to-day regarded by a few as worthy of scientific treatment and as one of the most important conditions of good teaching. It is beyond question that without this knowledge, which the Gospels illustrate most pointedly, no teaching worthy of the name is possible. Child-study, or better pupil-study, had its origin in the Gospels.

If it be true that Christ's immediate and closest disciples

[6] Matt. 5, 11, 12, 26; Luke 7, 10: 25, 13, 15; John 1, 6, 8; *et passim.* Note particularly His judgment as to John (Matt. 11); Nicodemus (John 3); Simon (Luke 7); Herod (Luke 13); the Pharisees, (Matt. 5 and 6). Conf. Matt. 16 and John 13 for other evidences. Note also the various parables whose very point depends upon accurate and appreciative knowledge of things and apt application of this knowledge.

were adolescents, we have still stronger evidence of His knowledge of men. Adolescents are most easily stimulated and inspired by altruistic principles, and attach themselves ardently to causes, when rightly approached.

4. **Vital grasp of the law of apperception.**— The point just noted is closely related to the principle that has sometimes been called *apperception.* From the pupil's point of view it is based on past experience. From the teacher's standpoint it is based on knowledge of his pupils. No one ever used this principle or defined it so aptly as Christ,— "to him that hath shall be given . . . ; from him that hath not shall be taken even that which he seemeth to have."[7] Not merely was He careful to build on some basal thought when at hand; when not at hand He awakened it. Discussion, which He frequently excited, reinforced it. He had power to stimulate thought and to make it intense. Many passages finely illustrate the principle, but especially the episode in which the lawyer came to Him for instruction (Luke 10),[8] for it impresses two points connected with our topic:

(a). Christ brought vividly before the lawyer, or rather led him to bring vividly before himself, what he already knew and actively believed,— believed with an intensity produced by the warm sentiment of Jewish tradition and the thought of an honest and inquiring mind.

(b). Christ did not give any new points till the man had an opportunity to think,— till he actually felt and expressed the desire for something more,— and He skilfully placed him where he had this opportunity to feel, and feel in something more than a superficial manner.

The general principle of apperception, which involves interest, is the key to modern pedagogy. There must be some basis for appreciation and interpretation, or nothing results. A vigorous germ of thought that is one's own grows under direction,

[7] Matt. 25:29.

[8] Illustrations of this same principle are found in abundance. See Matt. 5–8 (several passages), *et passim.* Some notable illustrations of fine apperception building are His teaching episodes with Nicodemus and the woman at the well, (John 3 and 4); the parables, (Matt. 13); His cautionary lesson as to the Pharisees. (Matt. 16): His interpretation of the ideas "mother and brethren," (Matt. 12:46 ff.).

and may even be transformed without friction. A foreign thought dies.

Following this pedagogical plan, Christ, by a natural process, built from the germ of thought that He used as His foundation to constantly broader thought and principles. He had power also to present the subject from many points of view, so that the truth could flash from many sides. Many might thus see one flash; some would see many. The principle requires such application when there is but one pupil, much more when there are many.

But there is a still higher application of the law than any thus far touched upon. Christ used it in His teaching so extensively that it gives tone to His whole method. How should He lead men to some conception of God — lead them from the familiar to the mysterious unknown, from the primitive horizon to larger and remoter horizons? Man must be interested in fellow man, must live in him, must serve him; must appreciate nature and feel it; must see God in both man and in nature before he can venture intelligently into remoter regions. He must go step by step apperceptively from the near to the remote. Hence it was through the conception of fatherhood that Jesus led men to the Father,— not in that way exclusively, but in that way conspicuously. Have we not tried partly to reverse the process and partly to check the process at inopportune stages? Adolescence is religious vantage ground. Christ knew how to use it.

5. **Sympathetic contact.**— Closely associated with what has just been said is Christ's *power to come into close and sympathetic contact* with His pupils,[9] meeting interest, desire, earnestness, and appreciating insight on their part, whether it had to do with the main point at issue, or with some related point that He could use to lead up to His object. Interest, sympathy, love, however, were mingled with broad, keen thought, unhesitating knowledge, strong attitudes.

[9] Matt. 6, 8, 11, 15; Mark 10, 12; Luke 2, 9, 13, 19; John 11, 13; *et saepe*. Two of the best illustrations are his contact with Zacchæus and his intimate teaching of Nicodemus, (Luke 19; John 3). Professor Palmer's first qualification of an ideal teacher,— an aptitude for vicariousness,— is shown at its highest in Jesus.

6. **Master of pedagogy of interest.**— A further word should be given to one point just noted. Jesus was a *master of the pedagogy of interest.*[10] He knew how to use it and how to develop it. No studied plan, i. e., no studied series of lessons, or course, is manifest, but, by plying the principle of interest, as occasion showed it to Him or gave Him the conditions for germinating it, He impressed on men His most insistent thought. Education is barren and dreary when we desert this principle and pin our faith to formal training. It is the binding and unifying force in all educational laws and principles. We have wasted time by seeking and using something else in its place.

He not only knew how to use interest in the one to be taught; He recognized interest on the part of others. He welcomed *the third party in education.*[11] Isolation of school would be farthest from His thought, if He were present in our system. Correlation of school and home would grow from this attitude.

7. **The individual, not the subject, the center.**— All this indicates that He had *not so much a subject to teach as an individual to be developed.* The subject is best served through individuals. If a teacher can choose the stimulus best adapted to the individual and his needs, can make the right impression on the delicate nerve mechanism of the pupil, and thus rouse self-activity to work in promising directions under wise guidance, he has the conditions for real educational work. Such power had Christ. It appears everywhere in His teaching episodes. The individual is thus the starting point, the center,

[10] Matt. 19; Mark 1; Luke 4, 13; John 4, 8, 10.
Various illustrations noted on previous pages show this. Jesus projected interest and developed interest. Everywhere He had interested and attentive pupils. Even those who were not in sympathy with Him showed one edge of interest intensely (Matt. 19).

[11] Matt. 9; Mark 7, 8; Luke 5. No incidents in the Gospels are more interesting than those that present Andrew and Peter, Philip and Nathaniel, (John 1); parents bringing children (Luke 18:15); friends bringing a sick friend (Luke 5:18); the woman sceptic, after her interest was aroused, summoning the villagers (John 4). In education not merely a good conductor for the transmission of power and interest, but also interested agents to bring to the center of power and interest those that would otherwise miss it, are essential factors, if ideas are to reach larger masses most effectively.

and also the end in view. How different this from the average teaching of succeeding centuries! Again, supposing His apostles were adolescents, how finely adapted was His teaching to that age. Great inspiring truths, rather than petty details, appeal to the adolescent mind. Stimulating thinking in elementary lines suits the case better than the dry forms of abstract teaching. The Gospels are full of these things.

8. **Objective work.**— But another principle of method is needed to give full effect to the principles and qualities already noted, to provide a psychologic point of contact between pupil and teacher. Teaching may slip by a pupil in spite of strong personal qualities, if the material of instruction (we call it study-content) is too remote and abstract or too extensive and detailed. To clarify the teaching of a new topic the teacher must first of all get away from the abstract and formal. He must come within the experience and development of the pupil. Objective contact with a new idea is absolutely essential to success. Nothing interests and stimulates the pupil more and clears the way better than to bring him face to face with the object that embodies the new idea, directly, if possible, if not, indirectly through some device. Then the pupil really thinks because the point at issue is within his power. He sees; he *knows*. Jesus was a master in *objective teaching* a millennium and a half before it took effect with the "Reformers" in education, who imperfectly caught up the idea that the Master Teacher had pushed into the foreground long before. With them it was a vision to be worked out in a more or less crude and labored way. With Him it was an intuition working itself naturally and effectively. Everywhere in the Gospels we find Jesus introducing something objective to make His thought plain. Many times since He pointed the way method has become so abstract, teachers have so selected study-material of education from an adult point of view, have so far transcended the experience and development of pupils,— in short, have come so far from appreciating real child and adolescent life, and have so far sacrificed objective training to so-called formal discipline at a critical age, that education has lost a very appreciable part of its meaning and effect. Every time reform

has taken hold of the educational process it has pushed it toward the objective and intensely human ideals of Jesus.[12]

Illustration.— A special form of Jesus' objective teaching is seen in His *marvelous illustrations*.[13] These illustrations through their simplicity and directness lead straight to the idea and make it plain. They both illumine the thought that Jesus is trying to present and focus the light, so that they not only make clear but excite curiosity to go further.[14] Hence they add a new force to method by putting thought-power into larger action, making pupils active agents toward the larger consummation of the lesson.[15]

These principles and elements of method, which have application in education without limit of time or space, clarify teaching, because they open the windows of instruction and let the light in. They are thus the means of giving real efficacy to knowledge and the other teacher-qualities that we have noticed. They give easy access to the ideas to be inculcated and the thoughts to be stirred, so that one is put simply and clearly on the highway to truth; more than this, they inspire initiative and supplementary thinking along the road.

9. **Compass.**— But the *compass* of a lesson conditions the value of objective teaching. It may be so great that the child's activities are discouraged and lost. It may be so small that they are not given due exercise. It is noticeable that in Jesus' lessons there was a single point so simple and clear, so free from hampering and befogging detail, that it could not slip the mind. And Jesus made the point so big, impressive, suggestive, that it not only set thought at work but gave it an inviting field for excursions beyond the limits of the lesson. What a rebuke for our modern school courses, so overcrowded with detail, in both secular and Bible schools,— courses too often dictated by adult rather than child interest.

Strong closing — Climax.— The effect of this fine propor-

[12] Examples of objective teaching are found everywhere in the Gospels. Something objective will be found in every teaching exercise of Jesus. For prominent examples see Matt. 6:28; 12:46–50; Mark 12:13–19; Luke 7:36–50; John 10.

[13] Taken up from another view-point on page 177.

[14] E. g., the "widow's mite" (Mark 12); the well (John 4); wheat and tares (Matt. 13); good Samaritan (Luke 10).

[15] See parables like "the sower" (Matt. 13).

tion observed by Jesus in the extent and content of a lesson was enhanced by the *climax*. The close of His lesson was a psychological one, not a mechanical one that our method so often involves. It was not an end, but a stopping place for the teacher just where the main thought was at its strongest, not exhausted but still vital enough to attract further activity of the pupil, and well within his range because of the wonderfully vivid and effective initiation that Jesus had already supplied.[16] Given such an initiation the mind may go on and on. Without it the mind takes a more or less quiescent attitude or comes to a distressing state of bewilderment. A teacher need not exhaust a subject to be thorough. His chief claim to genius lies in his ability to leave something for the pupil to do by himself and to put him on vantage ground to do it. Jesus shows here one of His strongest teaching qualities.

10. **Power to universalize.**—*Power to universalize*[17] is conspicuous. This gives His teachings their broad power and applies them to all time. His presentation of general principles that carry their own detailed application is found everywhere. The Greeks had, beyond all other nations, the power to generalize and idealize and then objectify their ideas in the eyes of the Greek race. No one ever showed such power to generalize from life and concretely picture as is found in the parable of the pharisee and the publican, which is a classic among realistic presentations of generalizations.[18]

People have been misled because certain civic and personal evils were not even mentioned, much less scored by Jesus. This is a striking tribute to the universality and immortality of His teachings. He developed and enunciated principles that would destroy every specific evil known or to be known by man.

[16] See the story of the laborers (Matt. 20); the Lawyer's question (Luke 10: 25–37).

[17] Matt. 5, 8; Luke 11, 18; John 4; *et saepe*.

[18] This is a generalization, not a particular case, as its form may suggest to a hasty observer. We may compare also other incidents equally striking — the exposition of neighborliness in the "Good Samaritan" episode, (Luke 10); of the principle of giving in the "widow's mite", (Mark 12), an example of swift seizing of a chance incident and turning it into a most vivid lesson. Again note his discrimination in service seen in the tribute scene, (Matt. 22). Matt. 6

No quibbling.— It is also to be said, taking a little different point of view, that *pettiness had no place*. Christ struck at the real matter and discarded the side issues.[19] Educational padding here receives no encouragement, but this does not apply to accessories that forward the pedagogical process and lend it vividness and interest.

11. **Language power.**— Another quality, one that has been the ambition of teachers for ages, was supreme in Christ, though it has received but partial recognition. This was *His language power*.[20] In the first place we are attracted by the clarity,[21] the deliberate force, and the perfect form of His language. This in itself is a rare accomplishment. Again we marvel at His power of illustration. Illustrative language is found in great variety and shows marvelous command.[22] His illustrations themselves are unique. They are familiar, but a freshness of insight accompanies them that makes them new. Sometimes they argue their own point, so aptly are they chosen. It is important also to notice that He uses series of illustrations that give the means of reaching many different types of mind at once.[23] They are always to the point, and the point is a pivotal one. But this is only one side of language power. We find besides a frequent use of *epigrammatic* or *apothegmatic* language,[24] which arrests attention and excites thought, and thus is an important, though nowadays too little used instru-

and similar chapters contain various striking generalizations put in striking form.

[19] See His impatience at quibbles, trifles, and superficialities of His time, and His swift striking at the main issue in Matt. 19: 16 ff.; 23: 25; Luke 18: 18. He had no use for mere externals, the "outside of the platter," the wordy prayer and the prayer of words, the trifling details of rules that miss the real point, the "Lord, Lord"; He sought the heart of things. See Matt. 7: 21, Matt. 25, etc.

[20] In the Gospels *passim*. A good illustration is Matt. 6, Luke 12. This appears even in translation. The original always enhances a language characteristic.

[21] This was partly because He spoke in the "vernacular." This does not mean that He spoke in the dialect of the people merely, but that he used their simple, everyday vocabulary.

[22] E. g., Luke 10, 18, *et saepe*. His lessons are filled with illustrations of various types and from various sources,— simile, metaphor, parable, and plain illustration.

[23] See Matt. 13; Mark 4.

[24] See Sermon on the Mount; also Matt. 20: 16. Illustrations occur everywhere.

ment in teaching. Again there is a frequent recurrence of *suggestion* [25] in place of definite statements, which also is a part of good educational economics. It gives scope for reflection, an opportunity for personal development of germinal thoughts, and so produces intellectual and spiritual fibre.

Dialectic is a special type of language power. It was a method, a typical educational contribution, of the best educated race of the time, as we have seen.[26] But Jesus had a dialectic swifter and keener than any yet seen.[27] His power of questioning and of logical investigation was such that He could strike at once the main point and make it clear. No roundabout or antagonistic series of steps was needed. One or two questions sufficed and yet they upheaved a truth that was clear and powerful,— no trivial truth, but a massive one. It is well suggested that He asked "great questions." Minor interrogations did not encumber nor overshadow those that went to the heart of things.

And Jesus had command of *beautiful language*. He could be poetical in the finest way.[28] He could reach truth by the swift inspiration of esthetics and rhythm, as well as by the more deliberate method of prose.

This language power left little room for formal didactic teaching, and immeasurably added to His teaching power.

12. **Breadth — adaptation.**— There is another important quality that is essential for a strong teacher. Christ showed that He commanded *all the relations of life*, and so was a master in influence. In this He strikingly contrasts Himself with the partial qualifications of some, probably many, teachers. He could give and receive. He could command and obey. Service was a central thought in is creed.[29] He was thus a fully developed, well-rounded teacher.[30]

[25] A good example of suggestion is John 2: 19. Perhaps a better one is Matt. 6: 22. Various good examples are found in Matt. 5, 6, 7, and in Luke 10: 30 ff.

[26] See Chapters V and VI.

[27] Matt. 6; 12: 11; Luke 10: 36 ("Which one of these three thinkest thou was neighbor?"); 13: 15; 14: 5; John 7: 23; 21: 15.

[28] E. g., "Consider the lilies," Luke 12: 27.

[29] See Luke 2; Matt. 25.

[30] We here analyze Christ as a teacher. This best makes Him a leader and an example.— brings Him into closest touch with teachers.

13. **Poise.**— Nothing is more noticeable than the qualities that may be summed up in the term *poise*,[31] and nothing in the teacher's equipment is so valuable, so telling in all the dealings of education. Poise not only gives time to work, allowing educational forces to perform their legitimate functions, but it removes unfortunate conditions that are the source of friction and destroy relations. It thus tends to avert ill-considered action and views. It gives thought free play. It puts everybody and everything in a position to realize the best. It recognizes the educational value of difficulty and opposition. In this quality are gathered calmness, dignity, confidence that begets confidence, and a pedagogical patience that is careful not to excite premature development, a patience that regulates the pace of events in accordance with the nature of the case. Compare Christ's calmness with the flurry and perturbation of His disciples on different occasions.[32] Even when He seems to break His calm we find the same power,— a kind of deliberation that finds and emphasizes the vital point at issue, rather than excites a surface indignation. The former wins, the latter loses, whether in social contact or in school discipline. There is also a noticeable absence of the spectacular, a constant sinking of self below the truth that the self is presenting, an attitude that gives real power to truth and to teaching.[33]

14. **Dynamic qualities.**— *Devotion, persistence, fearlessness, earnestness* gave point and force and steadiness to all His

Such analysis, however, is consistent with all theology, and it does not detract from, nor offer any impediment to, analysis from any other view-point.

[31] Matt. 4; Luke 4; John 2; *et passim*. It is perhaps best expressed in the parable of the tares, "Let both grow together till the harvest," because Jesus here not only shows teaching-calm and poise, but perhaps quite as significantly indicates His belief in the necessity of difficulty and opposing ideas in developing power. Poise is again shown in the poetic passage, Matt. 6:25. ff.

[32] Compare the impulse to vengeance on the part of James and John with Jesus' calmness (Luke 9:54); the perturbation of the chosen pupils under stress of tempest with the self possession and naturalness of Jesus (Mark 4:35 ff.). Compare the striking passages of Luke 22:50 ff. and Mark 14:50 ff., describing scenes accompanying the arrest of Jesus, and note how this calmness endured in times of greatest stress, when others gave way entirely. The climax came in the final scene with its "Father, forgive them."

[33] Matt. 6:4; 12:14 ff.; 16:20; 26:39.

teaching, or rather they were its sureties. Examples of these traits occurred frequently. An appreciative study of them should banish from teaching all superficialities, all temporizing, all compromising, and give to it a rich genuineness consonant with its high ends.

15. Various passages in the Gospels tell us of *solitary hours* and temporary withdrawal [34] in out-of-the-way places. In spite of His effort to secure quiet meditation, however, crowds sometimes gathered and even camped in these places for the sake of teaching and help, and because of the attraction of Christ himself,— His magnetism, to use a rather hackneyed and ill-defined term. Later monastic and hermit life made permanent what was occasional and temporary with Christ. Jesus' work was emphatically in the midst of life, and the solitary hours were tributary to it.

16. **Impressive personality.**— The qualities thus briefly enumerated, with others more or less definable, were elements in a *strong and striking personality* that drew and influenced. Personality is not a simple thing or a single power, though it may be regarded substantially as such by those who do not stop to analyze. As a matter of fact it is not necessary or desirable for those who are being influenced to analyze at the moment. They need only to feel. But if one is to develop power, analysis is necessary in order to direct effort productively. Analysis here reveals more impressively the personality of the teacher. Personality wins. It supports and renders effective other teaching qualities.

Implications.— To summarize some of the suggestions of this study it appears that new forces were prominent, calculated to change, 1, the form of schools; 2, the curriculum and method; 3, the aim and the scope of the school's ministries. We have potentially universal education. We have potentially also a broad and generous curriculum. In the direction of method the pedagogical principles involved bring in the best of modern method and tend to emphasize the true direction of education,— from the human subject to the culture subject, thus making the pupil, rather than any "study," the center of thought. We find also substantial ground for urging the study

[34] Matt. 4, 14; Mark 6; Luke 4, 9; John 8. Examples are frequent.

of the psychology of childhood and adolescence. The pedagogy of the Gospels enforces scholarship as well,— knowledge of the full meaning and possibilities of the subject to be taught,[35] including a knowledge of its psychology. This gives us a third psychology. Interpreting the educational principles of Jesus generously and genuinely we have all modern education. This is literal fact, not fancy, to one who will take the pains to examine.

Partial application of His principles in the period following Jesus.— Now it was natural, because evolutional, that at first the new forces should be but partially appreciated and imperfectly interpreted,— that only one side of man's spirit should be made the object of effort, and that the curriculum should be correspondingly narrow. Pedagogy would be still less adequately developed. Old methods would be less obnoxious than old matter. Men have generally thought more of *the what* than of *the how*. The most available educational method that suggested itself would be likely to be seized upon. Men had little inclination to think along pedagogical lines. Still less did they care to study men. To know that man had a soul and that an institution was to be subserved and forwarded was enough. Many of the plain suggestions of the Gospel as to pedagogy were therefore to wait long for just recognition.

Even this partial interpretation slow.— The conquest of even the narrow interpretation of the new ideas was slow. The first step will be the subject of the next chapter. But before taking up this topic it will be well to glance at the attitude of the Fathers who were a connecting link between the old and the first settled forms of the new.

Pedagogy of the Christian Fathers.

The fathers looked both ways.— It would be natural to expect that the Christian Fathers would look both ways in education. Old associations would cling, but new religious affiliations and new inspiration would color them and in time modify them.

[35] This is a three-fold knowledge,— knowledge of the facts comprehended in a subject, a knowledge of the history of a subject, and ability to adapt a subject to different ages and conditions.

The Fathers were regularly educated in the old Greek and Roman schools, which were found everywhere in the Empire. They studied, in secondary and higher work, grammar, rhetoric, literature, dialectics and philosophy, music, geometry, astronomy, natural philosophy, architecture and jurisprudence. Rhetoric was particularly prominent. Sophist ideas that originated in Greece were still found. In Roman schools and schools that followed Roman tradition, Quintilian's pedagogy was, of course, still a power.

Policy of the Fathers as to learning — The new learning.— The majority of the Fathers, particularly those from the East and from Alexandria, kept alive the old studies, but they added to them studies connected with the new religion, to which they showed great devotion and in which they were often voluminous writers. Much has been made of the opposition of Jerome, Tertullian, and Augustine to classical literature, and they certainly did express their disapproval; but at the same time it must be noted that these same Fathers, or some of them, may be used also in support of the old learning [36] guided and regulated. One of the strongest indications of opposition is found in "Apostolic Constitutions" of the fourth century in such directions as this:

> "Refrain from all the writings of the heathen, for what hast thou to do with strange discourses, laws, and false prophets, which in truth turn aside from the faith those that are weak in understanding."

The interdiction does not, however, seem to have been fully carried out in the lives of a majority of the Fathers.

Results.— The old curriculum was still in great favor among the educated classes generally, and was not rejected, or was definitely favored, by a majority of those most intimately concerned with leadership in the new order of religion. But while decided opposition to classical literature showed itself in strong places, so that "Pagan" learning in time came under the ban and Christian Latin literature came to the front, too much has been made of this disfavor. Other causes contributed to this retreat of learning. The ban was official, but

[36] West, Alcuin, 17.

was probably not universally active, nor was it a finality. The votaries of classical learning never ceased, and substantial schools continued the Roman tradition to more favorable times.

New forms of education.— But a study of the lives of the Fathers [37] indicates plainly that new educational forms were coming in, and that new schools were germinating. The terms catechetical, catechumen, reader in Christian service, and church teacher occur and are very significant. There are many references also to ascetic and monastic life that was gaining great influence and making rapid headway. The first monastery in the West was established by St. Martin, about the middle of the fourth century.

[37] See Farrar's Lives of the Fathers, which is full of allusions to new forms and ideas and full also of evidence that the Fathers got the best in the old Greek and Roman Schools. The feelings of the Fathers, whether in opposition or favor, or in alluring memories, are not difficult to find or appreciate.

XI

SECONDARY EDUCATION IN THE EARLY CHRISTIAN CENTURIES

Tendencies of the new era.— The spirit of the new era on which we are entering tended to revolution and reorganization, not of a cataclysmic sort, but quiet, steady, patient, pervasive, in accord with its motto of peace. Relations of capital and labor, ideals and practices of professional life, principles of national progress, ideas of philanthropy — society as a whole,— were to feel and respond to the new order. The theory and practice of education, as the fundamental agency for working out these changes, must themselves catch the spirit of the new force. This was the work of the first Christian centuries.

Conditions and forces. 1. The Roman Grammar School. — The conditions are plain. On the one hand we have the Roman Grammar school, which had adopted and adapted all of Greek education that appealed to the West, in matter, method, and ideals. It was a school marvelously perfect for the times in organization, method, and form. It was distinctively Roman, charged with Roman genius, a notable illustration of Roman executive power,— one of the type schools in the history of education. It was the embodiment of the national conscience and ideals, the darling of national solicitude and pride. As the institutes of law became a model for Christendom in one direction, the "institutes of education," as embodied in the Grammar School, became a model for schools of succeeding ages. In Rome, not in Greece, was the parent school of the West, as we have already noted.

Spirit of the new.— On the other hand there was the spirit of the new times whose ideal was growth, not acquisition, service, not domination, deeds, not words, gentle but persistent persuasion from within, not oratorical brilliance and

marshalled argument from without,— though it was capable of using and tempering all means.

Thus two ideas, that of the old Greco-Roman schools, and that of the pedagogy of the Gospels, were at work, in part influencing one another, in part antagonistic.

Results of the educational revolution.— Two courses are open to revolutionary ideas, first, the making of new forms with which to propagate the new, free from all contamination with the old; second, the use and transformation of the old. As is always the case, the new times at first took both these courses, according as they appealed to groups and individuals. Thus we have new forms of schools, and old forms modified by new ideas.

Various classes of people as related to the new religion.— It is very interesting to note the variety and kind of variety that existed in these transition years. The very growth of the new faith made variety inevitable. As Christianity became popular men attached themselves to it with varying degrees of intensity. Some entered seriously and with full purpose into the new. Some affiliated in greater or less degree with the Christians, but attached themselves more lightly to the new religion. Outside of these were a wavering class and a class as yet untouched.

Educational tendencies of different classes.— Some of these classes clung to the old school through sentiment and habit. Some, with self-denying will, abandoned habit and developed a sentiment for a distinctly new school. This applies to both form and matter, particularly matter. Method is impersonal and adapted to new as well as to old; the most that could be done here was to simplify, or to revert to a more primitive type. The early Christians did both. Elaboration was foreign to their ideal.

New subject matter for the schools.— As to material for study, the Christians, using old tools in new quarries, produced something adapted to the occasion. The Christian faith became a recognized branch of study, and a new literature on Christian subjects came into existence. It possessed much literary merit because produced by scholarly Christian Fathers who had received their training in the old classical schools. It was

adapted to both elementary and secondary instruction and speedily found its way into the curriculum in place of classical literature, or in conjunction with it. Alexandria, the greatest center of learning and investigation in the early centuries of our era, even gave the new schools a Christian philosophy. Its library encouraged learning. Its great school was the melting pot of Oriental and classical religions out of which came Neo-Platonism and Gnosticism. Naturally enough, it was in Alexandria that Christianity became a subject of philosophical investigation. A Christian and quasi-Christian philosophy was thus at hand to fill the place of that which Quintilian had in his curriculum, and to exercise the minds that craved this form of thinking.

Seven classes of schools.— The whole situation would indicate that the interaction between the old Grammar School, with its firm place in the affections of all educated people, and the new Christian forces that were rapidly supplying new material to give tone to old curricula, must have been vigorous and prolific. As a matter of fact, to meet the needs of a transition period and to serve the various shades of Christian thought and purpose, we find seven different classes of schools, besides several sub-classes. Only the most typical will be described here.[1]

The Grammar School type persisted.— The genius of the schools of early Christian centuries was Quintilian. The old *Grammar School,* or the Grammar School manned by Christian teachers, was probably the most conspicuous school of the time. This was natural and inevitable. Schools of this type were particularly numerous and active in Italy and Gaul.[2]

[1] A full list will be found in the Appendix.

[2] At the end of the fourth century Roman-Hellenic schools were still scattered over the provinces. Most of them had died out by the time of Augustine's death. Intellectual activity continued longest in the East. Roman traditions remained vigorous longest in Gaul. Laurie, Rise, and Const. of Univ., 13–19.

It has been customary to speak of the Roman schools as ending or being suppressed. As a matter of fact, many of them never ended; they grew and changed with the times.

In the time of Cassiodorus secular letters were still taught by lay teachers, probably the successors of the Grammarians of the Empire. There is evidence that such teachers continued through the Middle Ages. Patherius, about 900 A. D., writes, that in addition to those

Very early the new Christian forces took possession of these schools and school forms of ancient education. They did more,— they gave new life through new ideas and a stronger purpose. For a time Julian succeeded in revising the teaching force in these schools and banishing Christian teachers; but this was a mere episode in their history and could not long check the tendency of the times; the past could not be rehabilitated.[3]

New school agencies. The Catechumen and Catechetical schools.— But the new religious and social awakening must have a special agency of its own for studying and settling its fundamental ideas. It secured this in the *Catechumen school,* planned first for adults and later for children. Its fundamental purpose was instruction in the typical principles and forms of Christianity; even when the elements of secular letters were taught, it was doubtless for the furthering of the new doctrines.[4] The new times secured a special agency also in the *Catechetical school,* a high school established for the same general purpose as the Catechumen school. It was proposed to make converts the intellectual equals of others. The new school agency appealed to, and gave scope to, culture activities of intellectual centers, beginning at Alexandria. It was a close copy of Greek schools rather than Roman, but was pervaded by a Christian spirit and purpose.[5] In time it yielded to Roman influence and took the form of the Roman Grammar school,

who attended Episcopal and Monastic schools there were those who "Apud quemlibet sapientem conversati sunt." Clark, Latin of the Middle Ages and Renaissance, 54 f.

[3] In prohibiting Christians from teaching rhetoric and grammar, Julian said, that men who exalted the merit of implicit faith were unfit to claim the advantages of science. He hoped to paganize those who attended his revised schools and to insure the inadequate training of teachers who were taught elsewhere, thinking that an inferior class of teachers incapable of training Christian students to meet the learning of the grammar-school youth, would take the place of Christian teachers who under previous educational organization "possessed an adequate share of the learning and eloquence of the age." See Gibbon, Decline and Fall of Rom. Emp., Chapter XXIII.

[4] Note the "first Christian common school, established by Protogenes, in the second century, to teach reading, writing, texts of Scripture, and psalm singing. Seeley, Hist. of Educ., 105.

[5] Davidson, Hist. of Educ., 121 ff., gives a very interesting and appreciative account of this school. A genuine Socratic method was prominent.

reduced in scope and thoroughness, and modified by Christianity.

Domestic education.— The uncertainty that has been referred to, the dissatisfaction with prevailing schools, and a feeling of danger from them, seem to have suggested another solution of the educational problem,— domestic education. Many a Christian home made sure of Christian influence by home instruction.[6]

Three types.— Most of the schools of the period differed in form, in organization, and sometimes even in purpose. They may, however, be classified under three types: — 1, The old Roman type; 2, the Roman type modified by Christian studies and teaching, with its correlative type, the Catechetical school; 3, the purely Christian school, seen in the Catechumen school with simple religious curriculum.

A coming school.— But there was a fourth type that began to be visible on the educational horizon, and for this reason was not so characteristic of the age as were the others. In its elementary form it was similar to other schools of the time in organization and purpose; in its secondary form it was an impoverished counterpart of other secondary schools. It was distinguished from others more particularly, however, from the fact that it was absolutely removed from the contaminating influence of the world, being a part of a community life separated from ordinary social contact and devoted to religious cultivation and contemplation. It was the cloister school.

Method.— The general method of the old secondary schools remained in schools of the first and second types; but dictation and memorizing were coming to be more exclusively used and there was a tendency to narrow the old learning and to condense it in epitomes, as seen in books that became the standards for many centuries.[7] Schools of the third type brought in the catechetical plan,[8] which has played such an important part ever since, so far as the church has regulated school pedagogy. It was not new, but was given a new devel-

[6] Amer. Jour. of Educ., 24: 523.
[7] See Chap. XII.
[8] Question and answer method. Here was the beginning of the catechism.

opment. It had been merely a subordinate device, but it now assumed great prominence, in fact was reduced to a science.[9] On the other hand, the Catechetical school, which belongs under type two, and in a way also under type three, gave new prominence and force to the "Socratic Method."

Aims.— Aims varied correspondingly. The Grammar schools maintained the practical aim of Quintilian without the opportunity for practical application that was offered by larger political conditions of the earlier day. As already noted, the aim was reduced to a striving for formal rhetoric and literary form.[10] Side by side with it was the Christian aim of religious instruction for the purpose of establishing the Christian ideal; but soul culture was as yet rather a formal matter, so far as schools were concerned.

Period characterized as formative.— All in all we have a formative period in which new forces were contending with old. The contrasts, as well as the exigencies, of the time may be realized by considering on the one hand the work of a Julian, who thought he could make things move backward by the fiat of a monarch and could thus weaken a vigorous force which had many points of appeal, and on the other hand the work of an Origen, who brought the highest culture to Christian teaching and followed the broad course of the best schools of his day;[11] or again by considering the classical fervor of a Jerome or an Augustine[12] in connection with Christian devotion, at one period of their lives, and, at another, their renunciation (for others) of the same classical delights and their recommendation of devotion to the new alone; or by noting the extended education of most of the Christian Fathers in all that the old schools could give, as compared with the meagre instruction of the rank and file of the Christians who came under their influence, receiving as they did little more than religious instruction; and finally by contrasting the education and the practice of Fathers like St. Basil with those of Tertullian.[13] Out of

[9] See West's Alcuin for an example of elaborate catechetical work.
[10] Dill. *op. cit.*, Book V. See Laurie, *op. cit.*, 13.
[11] Amer. Jour. of Educ., 24: 5, 19–20.
[12] See also Farrar's Lives of the Fathers (Jerome), and Augustine's City of God.
[13] Farrar's Lives of the Fathers, Teuffel's Latin Literature, *et al.*

this mixed period of contrasts and contradictions must come a crystallization of some sort. Its nature can be divined by noticing which forces are most virile and most popular. Real life was with the new ideas. The old order now had little more than forms whose force had departed.

Summary.— The early Christian ages therefore defined certain ideals and aims of education, but produced no distinctive secondary school that endured. They were, however, working vigorously at the educational problem. A mixed and unsettled period it was, in which men were adapting old and new to new needs and ideals in various ways and for various purposes. The old was declining; a new school form was in sight which was almost to clear the field.

APPENDIX

SCHOOL FORMS IN EARLY CHRISTIAN CENTURIES

1. *Old Roman schools.*— Municipal schools supported by the municipality, or by the municipality and imperial government together. Finally the state was the sole authority. They were public schools. There is some reference to jobbery in spending public money. These schools persisted for a long time.

2. *Private schools similar to* 1.— Supported by subscriptions and managed by private authority,— at least till schools became a part of the state.

They had the old Quintilian curriculum with more emphasis on literary study, including grammar and rhetoric. Other studies were subordinated more than in Quintilian's plan and used for illustrative purposes. Quintilian's curriculum was fresh and related vitally to life, real and filled with reality. But the curriculum now was largely a matter of simple culture, with less connection with public life and no relation to free political development. Life and ideals were in Rome's past. There was a perverted idea of history; no interest in current history; no interest in nature or investigation; little concern for the fate of the Empire, which was constantly threatened and constantly suffering. Education was a form and its substance was form, gained through imitation of the past. Fresh creation was not an object of effort. Roman schools were soon in a decadent state verging toward extinction. They remained vigorous longer in Gaul than in the Empire generally. (There was, however, a freer and more vigorous intellectual life in the church. There was interest in history here, but of a rather narrow scope.)

Method: — The old Grammar method described by Quintilian, but more concerned with form. It loaded the memory and strengthened the imitative power, instead of stimulating thought and imagination. It

involved grammatical drill and drill in composition, brilliant rhetorical exercises, but no scientific inquiry.

These schools may be divided again into

A. Grammar schools taught by adherents of old Roman ideas.

B. Grammar schools taught by Christians (often perhaps of Class 2). Christian studies,— patristic literature, etc.,— were probably added to the course, at least in some cases.

3. *Catechumen school:* —

a. For adults, to train them for the church.

b. (later). For children, offering reading, writing, christian studies. Method: — Catechetical, memorizing.

About 200 A. D. Protogenes established a school in which reading, writing, Scriptures, and psalm-singing were taught. It was called the first Christian common school. (Many such schools may have been established.)

4. The *Catechetical school of Alexandria,* where the trivium and geometry, with Christian studies,— patristic literature, etc.— were taught. There was also a higher school. Method: — Catechetical and dialectic; lectures; also memorizing. This school was established with the idea of educating churchmen in a broader way, and giving them a training similar to that of the old school, but added Christian studies. It all had in view a fuller grasp of the new faith, and centered in it. It was necessary to prepare churchmen to meet their opponents with an equal training and on their own ground.

Origen, a famous teacher here, made much of natural history, mathematics and astronomy, all leading up to philosophy. Geometry with him included geography. Physics, or natural philosophy (a kind of nature study), he called physiology. These studies were probably intended for higher education, but they included some secondary features.— His method was catechetical, dialectic, analytic, experimental.

The catechetical school appropriately began at Alexandria. It spread rapidly, especially at Episcopal seats. It continued for ages, though under another name.

5. *Christian private schools,* having the old curriculum with new Christian studies. They were taught by the best graduates of the old schools. We find also itinerant teachers. Again each home was to be a school.

6. *School of Cassiodorus.* He set up a claustral or boarding school about 500 A. D., imitating Eastern monasteries. It offered the trivium, with arithmetic, music, and Christian studies. He wrote text-books for the trivium and for the new studies. There was a higher curriculum also. Method: — Probably the old grammar method; in new subjects, learning from dictation and exercise of "holy memory."

(*School of Eusebius.*— Probably a school of high grade, for it produced many noted men. It must have had a combination of the old curriculum and the new.)

7. *Some pre-Benedictine Monastic schools* were established early

(about 400 A. D.), especially by Cassian. Basil, an Eastern monk, gives as his ideal a simple elementary curriculum with Christian studies,— catechism, Scriptures, church ritual, and the wonderful events of Scripture in place of the old mythology. Method: — Committing to memory; prizes; frequent questions. According to the rule of Basil monks were bound to "give asylum to orphans, to receive children, and train them, as well as to instruct all who came to them, in the catechism, the Scriptures, and church ritual." Monastic schools, however, had a comparatively small development now. The curriculum generally was very limited, bare, and narrow. But it must be looked at from the point of view of the times and with appreciation of existing conditions.

XII

SECONDARY EDUCATION FROM THE SIXTH CENTURY TO THE EARLY UNIVERSITY PERIOD

The ascetic life — Psychologic explanation.— From early times the idea had existed that holiness was best attained by some form of ascetic life, which removed from distracting secular thoughts and gave opportunity for peaceful contemplation of the ideal. This idea had taken possession of sensitive souls, who were open to spiritual influences and inspired by high religious emotions, and of those who were attracted by transcendental ideas. Those of the first class were far the more numerous. To the second class belonged such thinkers as Plato, who advocated withdrawal from the world for the highest attainment of power (later to be used for the public), and Pythagoras, who formed a community devoted to an ideal life. Neo-Platonism, which combined Greek and Hebrew elements — Greek intellectuality and the strong religious feeling of the Hebrews — reinforced the motives for ascetic life.

Practical reasons.— But to the psychological causes, the state of the times added others of a practical nature. The unrest due to the breaking up of the world-empire of the Romans, and the hardships, cruelty, tyranny, and wide-spread vulgarity and depravity of the early Christian centuries gave strong incentives to withdraw from it all and to lead a holy life free from the turmoil and moral contagion of the day. Again, the belief that the dissolution of all things was coming and a second advent was at hand gave greater impressiveness to such thoughts as have been referred to. In an important class of the community they minimized the existing order of things almost to the vanishing point [1] and made efforts for spiritual salvation the logical as well as the practical mode of utilizing human activity. The various motives of course influenced

[1] Rashdall, Univ. of Med. Europe, I: 30–2.

men in different degrees; some of them probably did not operate at all in many cases. Perhaps the strongest force was found in the opportunity for a secure and peaceful organization of life, when other organizations were going down.

Growth of monastic orders.— Communities of recluses, or monks, carefully and systematically organized, thus came into existence, and, with the rapid diffusion of the monastic idea, grew into a compact "order." Naturally various orders arose, each distinguished by a characteristic set of rules or by some striking principle of life, whether social or industrial.[2] The orders were attached to the growing church organization which was steadily developing a system that, for compactness and articulation of parts, rivalled the Imperial System of secular Rome, and eventually took its place. The monastic spirit was wide-spread, but it had its richest development in the West, and it is there that we are most concerned with it.

Favorable conditions for study.— There were evidently time and opportunity for learning in these monastic communities, and there is abundant evidence that learning went on, even when the studies involved were under the shadow of popular and official disapproval. We must believe that many a monk became the possessor of all the best of the old culture.[3] It may be a question whether official disapproval was not always more or less perfunctory. A contemplative life was especially favorable to study. The monks and ecclesiastics absorbed and transmitted the thought and culture of the old schools. In fact, in the destruction of the old order of things, they were the only media for this transmission. But for the majority it was only a fraction of the old that was needed; the rest of it was neglected or actually shunned under the conditions that have just been noted.

A new school.— The monks however did not merely give themselves to study for their own pleasure. Schools for others and varied training in the arts of life naturally came to be a part of their work. They were industrial and intellectual mission-

[2] Appendix I.

[3] See West, Alcuin; Compayre Abelard; Mullinger Schools of Charles the Great, and History of Univ. of Cambridge from the Earliest Times; Amer. Jour. of Educ. 24:343 ff.; Augustine, City of God; *et al.*

aries for their environs. They must train boys to take their places in the religious community and thus keep up the order. To this they added the elementary training of outsiders or "externes." This training in many cases, or at any rate at certain times, was probably reduced to a minimum.[4] As a rule it concerned itself chiefly with that which was necessary for church service. But, on the other hand, it often included large elements of a liberal education.[5]

The school public.— Most of those who aspired to even the rudiments of an education were those destined for ecclesiastical vocations. But the schools were open to and received at different periods a considerable number of others.[6] Only a very small part of the people, however, received even the simplest education.[7]

Libraries.— But the schools of the monks touched education in another manner. They gathered and maintained the libraries of the day, and through exchanges reinforced one another's literary treasures. These libraries affected education by creating a literary atmosphere, however attenuated, and by supplying culture material.

Cathedral schools.— Monastic Orders were not alone in developing religious and educational organization. As the great cathedrals came to play a part in religious life, a similar school organization, but with more of a lay and secular element, grew up in connection with them. Here an ecclesiastic community was the counterpart of the monastic community and it was as carefully organized as the latter. As the cathedral community extended its organization parish schools of more modest form and scope arose, associated in organization with the cathedral.[8]

General character of the new school.— These religious

[4] Ziegler, Geschichte der Ped., 28 ff.

[5] The library at York is significant as to the scope of learning. See Mullinger, Sch. of Chas. Gt., 60 ff., 74 ff.; Univ. of Camb., 7 f.; Laurie, *op. cit.*, 24 f. See also references given later as to exceptional schools. On the rise of this new school generally see Mullinger, Sch. of Chas. Gt., 24, 29 ff., 32.

[6] Laurie, *op. cit.*, 27 ff.

[7] Nohle, Germ. Sch. Sys., in Rept. of U. S. Com. of Educ., 1897–8, Vol. I, 8–11; Howard, Evol. of the Univ., 4.

[8] West. *op. cit.*, 55.

schools, which have been briefly referred to and which in general had the same aim and the same form, had crystallized out of the mass of forms which the last period presented. The monastic and cathedral schools arose naturally and combined with the elements that preceding centuries had defined religious studies and an insistent religious ideal. They gave the control of education to the religious orders and the clergy.[9]

But old Roman schools did not cease.— The confusion and upheavals attending the incursions of new tribes, who had fresh vigor and new ideas, but were almost devoid of what the empire knew as culture, and the frowns of the Church on the old learning had the effect of discouraging the old schools to such an extent that they seriously declined. It has been said and re-said that they came to an end. But the idea that so powerful and deep-seated an educational force could be entirely suppressed is beyond credence. There can be no doubt that many of these old schools continued under new auspices,— with curriculum augmented by new Christian studies and with new spirit, it is true, but yet distinctly traceable, so that forms and methods could be easily identified with those of Roman times.[10] The church took over these schools, it did not destroy them; and it moulded them according to the new ideas. This Greco-Roman tradition persisted in Italy and Gaul, and in the Irish school (whether within or without Ireland itself). But the prominence of the old curriculum did not occur at the same time in these three sections. Now it was conspicuous in Gaul, now in the Irish schools, and finally in Italy. It persisted more uniformly in the latter country, though more conspicuously in the later period. Greco-Roman education had been overshadowed by other forms of education in most places, but it was left comparatively unmolested in Italy.

Two classes of the new schools.— The political turmoil of the period, the belief in a not distant end of all things that existed in greater or less intensity down to the tenth century, the seclusion and the narrow ideals of schools, which we have

[9] De Montmorency, Intervention of the State in Eng. Educ., 8, 35–6, 41, 56, 59, 66 ff., *et al.*

[10] Davidson, Hist. of Educ., 153, 156; Mullinger, Sch. of Chas. Gt., 32; Univ. of Camb., 11; West, *op. cit.*, 28–9; Rashdall, *op. cit.*, I: 26–7. See also Clark, *op. cit.*, 54. Conf. Chap. IX.

noticed in previous paragraphs, served to reduce education in general to low terms. From some accounts of the period one would be led to believe that learning became well nigh extinct. But it was never so weak as has been represented, though in its rhythmic movements it reached low points at different times and in different sections.[11] Great schools in many centers, York, Rheims, Tours, Fulda, Corby, St. Gall, and others, tided the tradition over periods of general apathy and neglect. These were the schools whose roots touched Quintilian soil.[12]

Charlemagne and Alfred.— It was in one of the low periods when education was in a partial eclipse, that Charlemagne took up the cause, and by his vigor and his organizing genius did much to make teaching universal and to give it new life and purpose. He devised a system of education that included elementary, secondary, and higher grades. He restored the old ideal and curriculum and gave place to the vernacular. He increased the efficiency of teaching. He added a civic purpose to education, which had previously been devoted exclusively to religious ends. A little later Alfred of England took up a similar work, but one of smaller scope. It is probable that these two reformers, at least Charlemagne, helped to revive the older Greek and Roman educational ideals. On the whole, they did not create, they simply revived, borrowed, extended, but they borrowed broadly. The Palace School that each King fostered at his court was but the rehabilitation of some older form. Charles found some of his teachers in Italy, and some in England, which was perhaps the brightest spot for learning at the time. Alfred in turn borrowed from the Continent, for meantime his country had suffered a relapse.[13]

It is not necessary to take special account of these episodes

[11] See Laurie, *op. cit.*, and old Chronicles,— William of Malmesbury, 62, 88 ff., 119–20, 125; Florence of Worcester, 66–8. See also Mullinger, Sch. of Chas. Gt., 37; Rashdall, *op. cit.*, I: 27, 29, 30, 32 ff.

[12] See Laurie, *op. cit.*; West, Alcuin, 174, and chapter VIII generally; Mullinger, *op. cit.*; Dill, Roman Civ. in the Last Cent. of the West. Emp.; Clark, *op. cit.*, 22 ff., etc.

It must not be supposed that we are making a new type of school. These were all Monastic or Cathedral schools, only with a stronger Greco-Roman flavor than others.

[13] Mullinger, *op cit.*, 35–9, 69–70. Conf. De Montmorency, *op. cit.*, 4–6; Florence of Worcester, Chron., 68.

in tracing the development of the secondary school. They are but parts of the larger monastic educational movement through which both worked. The latter may be summarized in such a way as to give us the typical school of the period. It is the less necessary to specialize here as both these movements were in a way short lived, depending on the lives of the two reformers and receding in the vicissitudes and confusion of the unsettled times that followed.[14] Yet the influence of the limited movement permanently raised the level of education.

The ideal.— The general ideal of the schools of this period was preparation for church service, either as a " religieux," or as a freer member of an ecclesiastic community. A subsidiary aim was a certain training in Latin, the language of the Church, and, for some centuries, of the people. Often results were merely formal and brought into play memory rather than intellect; if words could be repeated or sung it was sufficient. The Roman Forum had passed. Pulpit oratory was a thing of the future, in any sense calculated to modify the work of the schools. There was no alluring goal therefore to tempt pupils or teachers to spontaneous and enthusiastic training in literature and expression. There were some conspicuous exceptions, it is true, but we are now concerned with the average.

Aims.— In the typical schools of the period Latin was the fundamental subject and in one direction or another monopolized attention. All knowledge came through Latin. It was an instrument of thought, rather than a means of discipline at this time. As Latin was so important in church life it would be fair to say that the subsidiary aim perhaps came to seem, in a way, the paramount aim of the schools.

Another subsidiary aim was of a practical nature. It had to do in the first place with the acquisition of skill in copying, essential for one of the most typical industries of the monasteries, that of preserving and multiplying famous literary works of the past. Again it found expression in training

[14] It should be noticed, however, that at least some of the schools fostered by Charlemagne continued to flourish during the dissolution of the Empire. Adams, Civilization during Mid. Ages, 164; Rashdall, *op. cit.*, I: 30; Conf. Mullinger, *op. cit.*, 165–66; Nohle, *op. cit.*, 6 ff.; Clark, *op. cit.*

"clerks" (in the narrower sense of the term), for the monk was the letter-writer and notary of the Middle Ages. The door of the church, Rashdall says, came to mean the door to professional life in Northern Europe.[15]

The curriculum.— These aims define the common curriculum of the new schools, some of which, as we have seen, were old schools made over, some of them new schools. We evidently have *Latin,* or *grammar,* as it was called, as the leading and absorbing subject. Next, because of its practical bearing on the school aims, and because it was a primitive element of education, came *music. Number,* or *arithmetic,* was necessary only so far as it related to the "computus." Then there was *document-writing* and *letter-writing,* to serve the needs of the religious community and the general public. A smattering of *rhetoric* from the Latin text might be added, at least in some cases.

Text books.— A history of education might be written from a study of the typical text-books of the various epochs, for they show both theory and practice in education, the former through fore-words and notes, the latter throughout the books. Fortunately we are able to examine the favorite text-books of mediæval education, or rather the favorite reference books, for text-books were scarce, or practically non-existent, except as they were made by pupils from dictation. These books were summaries, or "bald epitomes," of past learning, or a part of it. Men cared principally for information, for the bare facts, not for investigation, new thought, or even richness of detail. Past, present, and future were identical as far as knowledge was concerned. The past dominated, giving all and ruling all. In grammar the books dealt with definitions, classifications, and schemes, not with living language. In geometry they wanted the facts, not the process. Thus mere compends met the need and perpetuated the common ideal. They were practically the whole substance of instruction to the tenth century.[16]

The books most in favor in mediæval education were these:

[15] Rashdall, *op. cit.,* II: 696–7, 707. Conf. I: 26 and Mullinger, Univ. of Camb., 209 (note).

[16] West, *op. cit.,* 22–27; Mullinger, Sch. of Chas. Gt., 69.

Orosius, Historiarum adversus Paganos, Libri. VII.

Martianus Capella, Nuptiæ Mercuri et Philologiæ (Marriage of Mercury and Philology).

Donatus, Ars Grammatica (Grammar).

Priscian, Grammatica.

Boetius, Consolatio Philosophiæ.

Cassiodorus, De arte et disciplina liberalium artium.

Isidorus, Etymologiæ.[17]

Most of these were small encyclopedias of the seven liberal arts and, as Mullinger says, slavish compilations from great Greek and Roman treatises.[18] They have however this merit,— if they added nothing, they at least presented a part of the great inheritance of the past, though in a bare, uninviting form. Capella, Donatus, and Priscian were most used; in earlier centuries the first two were the special favorites.[19]

Some idea of these old text-books may be gained through abstracts of the grammars of Capella and Donatus that have been prepared from these books and placed in the Appendix.[20] As grammar was the chief secondary subject,— in fact almost preempted the ground,— the abstracts will be especially suggestive for our purpose.[21]

Method.— The method was that which reproduced things exactly as they were,—a storing method or rote method, not one that stimulated students to find out what ought to be and to increase the sum of truth; for not individual thought but the condensed thought of the past was the object of interest. Memory work thus dominated method, and this "requires definite form and small compass."

Concreteness in method.— But it must be remembered that the grammars and the method that accorded with them

[17] Taylor, Classical Heritage of the Mid. Ages, 47–8.

[18] Mullinger, *op. cit.*, 21 ff.; Taylor, *op. cit.*, 47–56. See especially opera ipsa.

[19] Mullinger, *op. cit.*, 21 ff.

[20] In connection with this list may be mentioned two other books that became favorites later and held the ground till the 16th century, — an abbreviated Priscian in verse, and the Doctrinale of Alexander de Villa Dei, in verse like the Priscian, but based on mediæval Latin. The verse form of these two grammars is significant, and is itself a commentary on the bareness and unattractiveness of the rote-method; it needed rhythm to make it tolerable.

[21] See Appendix 2.

represent only the formal work of the period, that language and concrete grammar were really learned by use, especially in the church service. Latin was the medium of communication. They lived Latin.[22] So when we look into a text-book of Latin grammar and find it a catalog of the more prominent abstractions in etymology and accidence, we must bear in mind that the illustrative material, the concrete, the life of language study, was outside the treatise, in the every-day life of the student, and no adequate idea of method can be obtained without considering this point. When we adopted the formal part of the old method we forgot this other and more important part of language teaching, and we did not modify the formal enough to cover the loss.[23]

Other matters that relieved abstractness.— While speaking of curriculum and method, we must keep in mind two educational forces that are not always noted in discussions of these topics: — First we have the collections of classical and Christian literature found in the monasteries, to which reference has been made before.[24] An occasional catalog that has come down to us gives us additional glimpses of the educational facilities of the times and tells of an influence that may have modified the barrenness of the formal text-books. Even these catalogs however give place to such books as Capella and Donatus, and do not contradict the arguments that make them the most characteristic school-books of the time.— Second, there were the monasteries, abbeys, and cathedrals themselves, which presented, in persistent forms, the figures, scenes, and even stories and allegories of Christian records and tradition. As Allen says in his "Great Cathedrals," "the church was the book;" from it people read, and from it they received indelible impressions of the great facts of the new era.

Real character of method.— Aside from these concrete elements, which after all relieved the dry and abstract work of secondary education but little, as has already been indicated, method was essentially formal and abstract. It agreed exactly,

[22] Amer. Jour. of Educ., 24: 353; Clark, *op. cit., passim.*

[23] But in spite of this concrete element formal, abstract work was considered necessary. See page 202, and note 25.

[24] See Am. Jour. of Educ., Vol. 24 (Early Christian Schools and Scholars); Mullinger, Sch. of Chas. Gt., 71, 165–6.

as it always does, with the conditions and the mental attitude of the time. A body of tradition carefully defined and to be possessed with exactness, a receptive attitude on the part of the schools, a fondness for words and forms rather than substance, and absence of strong individuality in the people, naturally carry with them a method which reproduces mechanically, and a strictness that brooks no failure from lack of interest and vital attachment to the subject, but pushes home the task. Rote learning agrees with these conditions, and harsh discipline accords with it and with the general sentiment of the time. "Grammar and flagellation, twin brothers," may be taken as a general summary of the average school of the period, and of a school of a much later period.[25] Learning elementary Latin Grammar was a dreary task, consisting largely of memorizing words, forms, abstractions and lists, before their significance was comprehended.

Some secondary schools of larger scope.— But at different points in the preceding pages we have caught sight of schools that easily distinguished themselves from those that have just been described. When we consider these schools, which are more important for our purpose because they were more nearly in the line of succession of secondary education than others and really represented secondary education during the centuries covered by this chapter, we must modify to some extent our ideas of the bareness and sternness of the curriculum and method just described. We must add a culture idea. In these schools pupils went to the sources and read and appreciated much of classical literature. In writing they gave more attention to style. They gained more insight into nature, science, and history, though their knowledge was still meagre and for the most part second hand. They touched the fine arts also. In their method the schools appealed more to interest, and in management they used a more sympathetic and hence more pedogogical system of discipline. Some of these schools attained great renown, but those that became conspicuous were very few. They had modified the Roman curriculum by adding

[25] Laurie, *op. cit.*, 36–7, 269. See also his chapter on "The Inner Workings of Christian Schools," in the same book. Conf. references on the Renaissance period in Chapters XV–XVI.

the new literature. They differed most from the old schools in the ideal that Christianity had supplied. Aside from these additions they did practically nothing to develop education beyond the earlier standard. These schools especially claim our attention. We shall have to deal with them again. At the same time their more humble associates represent the real education of the period, and, after all, make a great epoch in education.

Summary.— In summarising this chapter and defining the secondary school that characterized the age we must keep in mind the two types that have been discussed,— 1, the average school;[26] 2, the exceptional school[27] that was prophetic of the future.

AVERAGE SCHOOL

Curriculum:—

Religious instruction.

Grammar, — bare, formal work.

Meagre classical literature, for grammatical purposes chiefly.

Christian Latin literature.

Notarial work and letter writing.

Music.

Number.

(Rhetoric,— small amount, formal,— and Elementary Logic.)?

EXCEPTIONAL SCHOOL

Curriculum:—

Religious instruction.

Grammar. — Elements of Latin language. More life, substance, and meaning.

More classical literature,— for literary as well as for grammatical purposes.

Christian Latin literature.

Notarial work and letter writing.

Composition — both prose and verse.

Rhetoric and Elementary Logic.

Music.

Number; Arithmetic.

Geography; Geometry; Science. All meagre. Characteristic ancient ideas.

(Greek and History.)?

[26] Laurie, *op. cit.*, 24–30, 35 ff., 70 ff., 84–5, 92 f., 95; Mullinger, Sch. of Chas. Gt., 31, 35–9, 69–70, 74, 86–88, 110, 131, 158; Univ. of Cambridge, 21–2, 42; Paulsen, Germ, Educ., Chap. II (general acct.); Rashdall, *op. cit.*, I:27, 30, 32 ff., 37 f.; II:705; Nohle, *op. cit.*, 8–12; West, *op. cit.*, 27, 58, 82, 84; Howard, *op. cit.*, 4; Ziegler, *op. cit.*, 27 ff.; Amer. Jour. of Educ., 24: 99–100, 111, 365; Donatus, *op. cit.;* Capella, *op. cit.;* Davidson, *op. cit.*, 162.

[27] Laurie, *op. cit.*, 50, 86, 97 f., 173; Mullinger, Sch. of Chas. Gt., 132, 142 ff., 152–3; Univ. of Camb., 8 and note, 9, 20, 22, 42 ff., 57; Compayre,

Method: —

Dictation; rote-learning.

Written exercises; vocabulary building.

Catechetical plan much used.

Severe discipline; "flagellation and harsh memory work" characteristic.

Latin language, however, in common use; hence some elements of natural method.

Text-books and reference books few: — Priscian, Donatus, Capella, Isidore, Boetius. The last three compendiums of learning, —"transition books of transition centuries," from old classical culture to the revived culture of the 15th and later centuries. Books generally in teachers' hands only.

Aim: —

To learn the Latin language.

To make all subserve religion.

We should think of the curriculum as reduced to its lowest terms, — at least in many, and probably in most, cases. School work often gave nothing but a little poor Latin and instruction in the church forms, formulas, etc. The tenth century the darkest in France and England.

Method: —

Also formal, but more stimulating work, more interest. More pedagogical discipline.

Occasional references to such matters as absorbing from the master, — drinking in his words, — science illustrated by apparatus, etc.

Same books. Also classical authors themselves.

Aim: —

To master the language of the church and of literature. To prepare for ecclesiastical positions and other positions of influence.

More of culture idea comes in.

Towards the end of the monastic period ancient poets and orators began to be studied with genuine admiration.

Standards varied.— There was thus no universal standard. Secondary education ranged from the narrowest and most formal work to real liberal education. At whichever end of the

Abelard, 5–6; West, *op. cit.*, 13–16, 27 f., 31–4, 44–5, 66, 131, 136, 139, 140, 174; Nohle, *op. cit.*, 7–9; Amer. Jour. of Educ., 24: 339–40, 343–5, 348–9, 353, 355, 359, 361–2, 368–70, 540, 543.

line we observe, however, we find that the secondary school developed nothing new in curriculum, except formal religious instruction, and nothing new in method; but there was back of curriculum and method a great force that would eventually transform them.

The ideals.— As to ideals, the central thought was the perpetuation of a type, of an institution,— the old tribal ideal adapted. There was thus a return to primitive ideals, though colored by new religious ideas, and to a primitive type of method that was adapted to the ideal.

Amid such unfavorable surroundings culture still perpetuates itself.— And yet culture and scholarship always manage to perpetuate themselves through responsive souls. A few in every generation, however unpromising the conditions, catch the glow from the past and quietly maintain it. They, however, merely maintain; they do not intensify. Such times are not creative. The quiet seclusion of the age in question gave favorable opportunity for many a fine soul to sustain itself in culture and hand on the tradition,— gave opportunity also for groups of scholars to conduct conspicuous schools that were fair summaries of the best of the past from a culture point of view. This accounts for the exceptional schools.

Service of the age.— The one distinctive service of the age lay in crystallizing the new form of school that gave education the location, attachments, and suroundings best suited to its general character and aims at this stage of its development, and in making this the typical school of the mediæval times, giving it such prominence in fact that it seemed the only school form,— "ceu cetera nusquam forent."

Comparison between the typical school of the period and old schools.— This school, as has already been hinted, was the same one we have seen before, but the church was substituted for the state as a center of interest. The old curriculum and method were there, as a rule much attenuated and adapted crudely to the life and thought of the early church, but occasionally developed with surpassing enterprise. Even initiation ceremonies were there, but they represented induction into church citizenship rather than political citizenship. They were called confirmation, and the age of application was chosen for the same

instinctive reason that guided primitive tribes when they originated the ceremony, viz., the peculiar fitness of adolescence for the new life. Education has become institutional.

APPENDIX I

Six religious orders.— Human nature has not tolerated a single organization in any line. Many orders with the general purposes that have been outlined arose in the early Christian and mediæval centuries. To summarize and classify some of the most important developments in this direction we may say that the religious spirit of the times evolved five or six conspicuous organizations that particularly concern us here.

1. Monasteries of St. Martin and Cassian in Southern Europe, beginning in the fourth and fifth centuries. Cassian gave form to the monastic development.

2. Irish monasteries, related more intimately to Greek educational ideals.

3. Benedictine monasteries, widely spread over Europe. They represented a much more extensive movement than 1 and 2, and wider ideas of education than those of the Cassian system, though still narrow.

4 and 5. Franciscan monasteries and Dominican monasteries. They spread rapidly about the beginning of the thirteenth century and later. These took the place of the Benedictine establishments as educational centers, and figured prominently in early university life.

6. To these may be added organizations of religious functionaries in connection with cathedrals and collegiate churches similar to cathedrals,— organizations having more or less of the monastic spirit and form.

APPENDIX II

Summaries of some famous old text-books which were used in the schools for centuries and then served as a basis of newer books,— Lily's Grammar and others.

1. Martianus Capella.[28]

Prefatory Note: Capella has a unique and extremely fanciful scheme for presenting his treatise on the Seven Liberal Arts. He imagines the marriage of Mercury and Philology and very appropriately has as bridesmaids or attendants at the union of the crafty word-maker and the language maiden, the "seven arts." Each in turn comes forward and sets off her art in due form and style.

We first have an introduction in verse representing a kind of sportive conflict with the Muse who shows the advantages and even the necessity of rhetorical embellishments in treating a subject, and gently rebukes what the writer claims is his fixed purpose,— to bring on the various

[28] The Teubner edition.

"arts" as characters giving the plain unembellished principles (præcepta) of their special lines of interest. Scattered along the not uninteresting poetical arguments are such expressions as

Commenta — frigente vero nil posse.
. . . . . ;

Uitioque dat poetae
Infracta ferre certa
Lasciva dans lepori
Et paginam venustans
Multa illitam colore.
. . . . . .

Vestiantur artes.
. . . . . .

Cur ergo non fateris
Ni figurinis figura
Nil posse comperari.

Coming to Capella's prose he introduces the genius of grammar in the guise of a woman, in this rather fanciful style: —

"Leto's son now brings in one of Mercury's attendants, old, but comely, one claiming descent from Osiris and birth at Memphis, long guarded in secret, but found and educated by Mercury. In Attica where she has lived most of her life she wore the pallium, but enters the assembly of the gods now in Latin fashion, because of Latin environment and Latin auspices."

She enters as a "doctor" of language bearing the symbols and drugs of leech-craft, for curing various defects of vocal organs and faults of speech. Conspicuous among her tools is a file highly polished displaying eight gilded parts or sides (representing the traditional eight parts of speech that were a panacea for many language faults). Capella, after a long interval, goes on to say: "As often as she received any one to be cured it was her custom to treat first of the Noun,—the common errors and gender, then modes, tenses, and inflections of verbs. To cure the dull and slow she had them run the whole round, labor hard at the whole art."

After a preliminary description Capella suffers the grammar maiden to speak and explain her art. She first explains *names* connected with herself or her profession in Greece and Rome,—litteratura, litteratio, litteratus, litterator, grammatodidaskalos,—and then explains the scope of her art. Originally grammar had to do with "reading and writing well," but it has added to other functions that of interpreting and that of demonstrating skillfully, probably referring to the rise of oratory.

Next she refers to *four forces at work:* 1. Grammar (litteratura), the teacher; 2, letters (litteræ), the subject matter; 3, the grammarian, or scholar (grammaticus),[29] the resultant of the teaching; 4, the skillful manipulator of language who has attained cleverness in the art.

[29] Nepos (quoted by Suetonius) says the term ought to be defined *interpres poetarum.* In the period discussed in this chapter the gram-

She teaches, she says, the *nature and use of speech and the art of judging language.* In treating of speech she takes up the matter analytically, first dealing with letters. Letters are the product of nature (sounds), and the product of art (forms). They are divided into two classes,—vowels, which stand alone, and consonants, which cannot stand alone. The Greeks, she says, made seven vowels, old Latin, six, later Latin, five. They are long or short; acute, grave or circumflex; combined or single. They make syllables alone or take consonants on either side. They change into various other vowels in inflection. Explanations or illustrations are given to make these classifications clear. In connection with the last characteristic of vowels there is some curious philology:—"Item E littera primum in A reformatur, ut *sero, satum;* vel in *i,* ut *moneo, monitus;* vel in *o,* ut *tegendo, toga.* . . . Similiter *i* quoque vocalis in *a* convertitur, ut *signis, signa;* in *e,* ut *fortis forte.*—Non aliter *o* littera in *a* transit, ut *creo, creari;* vel in *e,* ut *tutor,* tutela," etc.

Then she goes on with statements and abundant illustrations as to the *relations and "junctions" of vowels,*—the letters with which they associate on either side and the words they can terminate. Some interesting philological points are given on the way. 1. *Oisus* is the old spelling for *usus.* 2. The letter *l*[30] has four sounds, *"exilis"* when doubled; *"medius"* when it ends nouns; *"leniter sonat"* when it precedes vowels; *"plenus"* when the letters p, g, c, or f precede. Again *n "plenior apparet"* at the beginning or end of words, exilior in the middle of words.[31] Divus Claudius, she informs us, in imitation of the Greeks added *p* and *c* (as *psalterium, sacsa*); *c* alone of mutes lengthens the preceding vowel.[32]

She next takes up consonants, divided into semi-vowels and mutes, and catalogs various facts as to the letters (preceding and succeeding) with which the consonants are associated. Here comes in the curious statement that *r is converted into l, n,* or *s* (*niger, nigellus; femur, feminis; gero, gessi*). Some, she says, do not make *s* a letter, but a kind of sibilant, though she finds that it deports itself like other letters. No one, however, makes *x* a letter, as it is doubled; it is transformed into *v* (*nix, nivis*), and into *c* (*pix, picis*). The letter *h* passes into *x* (*traho, traxi*). She makes altogether twelve semi-vowels, six vowels (including *y*), and five others (aspirates, doubles, or Greek), making twenty-three letters.

maticus was the head of the monastic school and came to have much power in the community. In the next period sensitiveness as to his perogatives (and particularly as to school revenues) stimulated or colored the conflicts of cities to establish new schools independent of the old.

[30] Page 59.

[31] Page 60.

[32] These and later examples are interesting in comparison with modern philological explanations.

The grammar maiden now runs over the various letters, showing by what conformations of mouth, combined with palate and breath, each is formed. This gives us some clue to the pronunciation of Latin.

A poetical passage follows, in which she tells us what she has thus far done and introduces the topics, "*syllables*," "*union* of *letters*," and "*accent*," and then, under the influence of the prose muse again, briefly refers to combinations of letters forming syllables, and hastens on to accent and quantity. She explains accent rather poetically as "*anima vocis et seminarium musices, quod omnis modulatio ex fastigiis vocum gravitateque componitur ideoque accentus quasi adcantus dictus est.*" She makes three qualities of sound, acutus, circumflexus (inflexus, or flexus), gravis, and tells what syllables go by these names. Here again she gives clue to Latin pronunciation, giving such examples as *Cotulo, Cethegus, occidit, tenebras.* She then considers the effect of the context in taking away or changing accent. Finally she takes up Greek words, which she says may be made Latin or remain Greek, but even in the latter case Latin and Greek agree as to middle syllables.

Several pages from this point on she devotes to a catalog of facts concerning syllables long or short by nature or position.

Common vowels next claim attention and here she makes eight categories, 1, short vowels followed by a liquid and consonant; 2, short vowels followed by a liquid added to a consonant; 3, short vowels followed by a consonant and *h;* 4, a short vowel ending a definite part of the sentence; 5, a diphthong before a vowel; 6, a long vowel followed by another vowel; 7, when the letter *c* (followed by a vowel) ends a pronoun; 8, when *z* follows a short vowel.

She next considers *final syllables* "in which rules and regular forms of art consist," meaning, presumably, that they suggest a regular system of prosodic rules and have much to do with artistic literary form. Here mingled with parts of prosody are pages which are the prototypes of classified material as to gender, found in the accidence part of every grammar to this day. It is to be noted that she seems to mix present and future participles here.[33]

This brings her to ANALOGY, introduced by a piece of poetry which is rather obscure in parts. She speaks of analogy in form and in declension and classification of words. Here we note the old form *specua* which she says the ancients used.[34] She gives variations in the declension of *genu* and *cornu* (some old forms), and also *optumus* and *maxumus.*[35] She decides that the plural *parium* and similar forms are mistakes.[36] She curiously gives the declension of neuter and uter as *neutrius, nutri,* etc., whereas only one example of neutri as dative is given in Harper (and this from Plautus), while there are several regular genitives. The ancients, she says, made *Hectŏris, Catōnis,* but we shorten.[37] Again the old form is *optumatum,* the new *optumatium.* She says *praegnas* is feminine and neuter[38] and speaks of the shorten-

[33] Page 285.
[34] Page 293.
[35] Page 293.
[36] Page 297.
[37] Page 298.
[38] Page 299.

ing of *rei* and *spei*.[39] She indicates that words have *-is* in the accusative plural, when the genitive plural has *-ium*. Again she mentions the fact that some add *t* to *lac* and that the ancients said *lacte*.[40] Following this she gives some hints as to the quantity of words ending in *x*.[41] She makes *v* a regular vowel and calls it such even in words like *nix*, saying that a consonant cannot pass over into a vowel.

She next takes up *verbs* of which she makes five classes,— active, passive, neuter, common, deponent. As to modes she presents different classifications as given by different authors, varying from five to ten. Those who give five, she tells us, make them indicative, imperative, optative, subjunctive (conjunctivus), infinitive (or universal mode). Others add a part or all of the following,— promissive, interrogative (percontativus), and subjective as distinguished from conjunctivus, but she decides there is no reason to go beyond the five.

The grammar goddess makes but *three conjugations*. She gives *audis* as an example of the third, but apparently recognizes two classes, those having *-īs* and *-ĭs*. The signs of the conjugations she finds in the second singular present. One notes in passing the curious form *triumfo*. She evidently makes the imperative the base form and builds other forms on it; the infinitive, she says, is formed from the imperative by adding.[42] Consistently with other parts of her presentation she makes forms by changing one letter into another. Some other interesting points noted in this connection are these: — The ancients left off the *e* in the imperfect. This tense she names *inchoativum*, while the perfect is *absolutum*, and the pluperfect *exactum* or *praeteritum perfectum*, or *species inchoativa*.[43] Terence made *-bo* in the future of the third conjugation. Four lines are given to special *cases with verbs*.[44]

Grammar now treats very briefly of *anomalies*, putting all remarks in the form, "when we say–, why do we not say–?"

The discourse is suddenly brought to an end by a device through which the assembled council at the nuptials signifies that it would be tiresome to them, as well as a thankless task, to run through other details, mentioning particularly the eight parts of speech, vitia, and other anomala. This suggests that various details not found here were given in school. It all makes grammar a dry, barren learning of facts rather than a thing of life. We may question whether the fanciful form of this grammar may not be a concession to give interest to dry formalism.

2. Donatus.

Book I.

1. Vox, i.e., sound,— articulate, inarticulate.
2. Letters classified.

[39] Page 301.
[40] Page 306.
[41] Page 308.
[42] Pages 316–17.
[43] Page 322.
[44] Page 324.

3. Syllables,— long, short, common. Long syllables have two "times."

4. Feet classified — abundant detail — abstract.

5. Tones or accent. Accent-signs and other signs.

6. Positurae, i.e., punctuation. They correspond to our period, colon, and comma, but are indicated by points placed at top, bottom and middle of line respectively.

Book II.

Eight parts of speech named. Donatus says "many make more, many fewer parts." No details.

I. The noun. Six attributes: —

1. Qualitas, indicating whether the noun is propria or appellativa. He includes adjectives among substantives (or appellativa nomina).
2. Comparison,— details and peculiarities. Diminutives come in here. Some case construction touched upon.
3. Gender. Details.
4. Number. Details.

5a. Figurae, here referring not to inflectional forms, but to composition. Simple and compound nouns. Manner of compounding.

5b. Compound substantives and their inflection.

6a. Cases. Some, he says, make seven cases, i.e., there are two ablatives, one with *ab*, one without. (In specifying the ablative both Donatus and Capella used ab or some other preposition.)

6b. Formae casum, i.e., peculiarities of declension,— aptotes, triptotes, irregulars, defectives.

6c. The ablative. From it he forms genitive plural and dative and ablative plural. He mentions accusative plural in *is* when ablative is — *i*, and accusative singular — *im*. (This is the nearest approach to the modern paradigm. Ancient grammars have little to do with these much used graphic presentations and have little to guide the pupil in inflection. But this is relieved by an important part of method which we forget. The Latin was a living language. Forms were learned by use.) Before closing the topic Donatus specifies the letters in which nouns can end.

II. The pronoun. Same attributes as nouns. Various details.

III. Verbs. Seven accidents. *Quality* of verbs depends on mode and form. Seven Modes,— indicative, imperative, promissive, optative, conjunctive, infinitive, impersonal, (the latter not being regarded as a separate mode by some).
Four "forms."— perfect, meditative, inchoative, frequentative.
Three conjugations.
Five "genera",— active, passive, neuter, common, deponents.
Two "numeri."
Two figurae,— simple, compound.

III. Three tenses,— present, preterite, future. The second has three forms, imperfect, perfect, pluperfect. (Donatus gives the names we are accustomed to and so differs from Capella).
Three persons (and in this connection the cases connected).

IV. Adverbs. Various origins. Lengths. Says facile and difficile ought to be regarded as nouns rather than adjectives.[45] Adverbs have three accidents, 1, "significatio" (place, time, desire, quality, etc.); 2, "comparatio" (here he includes diminutives as correlative with forms of comparison. He did the same in adjectives); 3, figurae,— simple, compound.

V. Participles. Six accidents; in place of "qaulitas" and "conjugatio" in verbs come "significatio" and "casus."

VI. Conjunctions,— with details of classification, etc. Uncertain whether cum and ut are conjunctions, prepositions, or adverbs; determined by context.

VII. Prepositions; 1, governing cases; 2, in composition. They have only one accident, case; there are two cases, ablative and accusative, the idea evidently being that the case following the preposition is its case. Accents of prepositions are acute and grave, according as they are separate from or joined with cases or words. The ancients used a preposition with the genitive, as crurum tenus.

VIII. Interjections.— Classification. Comparison with Greek usage. Some peculiarities.

Book III.

1. Barbarism,— violations of ordinary usage by adding, taking away, substituting, or transforming letters, syllables, quantity, accent, aspiration.

2. Solecism,— discrepancies, bad connection. Various details.

3. Various other vitia given, with their Greek names and with illustrations.

4. Metaphlasm, with details. Greek names.

5. Schemata, or figures of speech,— prolepsis, zengma, etc., all with Greek names.

6. Tropes. Various details. Greek names again.

[45] Section 1759.

XIII

SECONDARY EDUCATION IN THE EARLY UNIVERSITY PERIOD

Early Christian centuries and mediæval times compared as to spirit.— The early Christian centuries made good use of the training and methods of the Greek rhetorical and philosophical schools and the Roman grammar school in rebutting heresies, settling creeds, and building up generally the great body of patristic literature. The first stimulus of new thought and new ideas that came in with Christianity, working together with the old discipline and power produced by the old education, wrought marvels in this direction and left for the future a vast mass of material that was chiefly of a religious nature, but touched various sides of life, both social and political. The enthusiasm of a fresh age, goaded by the pricks of controversy that the times naturally developed, gave originality and life to the products of that age.

In contrast with this period succeeding centuries may be characterized as formalizing rather than creative. It is noticeable that the fresh thought of one age is moulded into form in another. Spontaneity and enthusiastic advance of one period thus give place to formalizing activity in the next, to quiet but wide-spread assimilation. The mediæval centuries stereotyped what had been set up for them by the earlier Christian age. Their quiescence in the direction of productiveness is emphasized by the fact that they not only did not add, they even condensed and epitomized to the barest summaries the mass of material in the production of which earlier ages reveled, and in the transmission of which they gloried. It was too much to take the whole. Besides, some crystallization or condensation in this vast accumulation was necessary in order that the average mediæval mind might compass it. At any rate they made large use of these condensations of the wisdom and the culture material of the ancients, as exemplified in the epitomes already

referred to.[1] But they also studied in various degrees the patristic literature which had been handed on, applying it in saintly life, church forms, church organizations, and ecclesiastic polities of a rather intense type. The schools of the period, settling down, as they did, into quiet and easy forms, and giving themselves to memory work rather than to investigation, were in exact accord with the times.

Significance of the rhythmic movement.— The rhythmic movement, one limit of which is represented by spontaneity and creative spirit, and the other limit by formalizing and assimilation, is the result of natural law. If it were not for this, advance thought would break anchorage, — would fail to attach itself to the world, and would eventually lose itself. There must be a time of assimilation before any new productiveness can take place. But in time the food becomes stale, nutrition suffers, and the nervous system of the world becomes restless for something new.[2] There is an eager grasping of fresh thought, or an enthusiastic reviving of a thought that has been lost, or the working over of old thought by a new method,[3] or the crystallization and systematization that introduce science. All of these we find coming into full view in the next period to be considered.

Influences at work — Saracenic enterprise.— To understand the meaning of the new period for education we must recall the work of the Saracens in Southern Europe that revived old Greek culture, particularly along scientific lines.[4]

[1] Chapter XII.

[2] In the present case the diet of past achievement had become so meagre that there was danger of intellectual ænemia.

[3] See Clark, Lat. of Mid. Ages and Renais. 36.

[4] Clark points out the importance of considering here the influence of Greek and Greco-Semitic culture of the Byzantines and Saracens. At points where the two lines of culture came into contact, as in Sicily and Spain, there was an inevitable stimulus of thought and intellectual activity from the antagonism and friction which the hostile systems developed as well as from contributions which each school of thought made to the other.

"The influence of Arabian learning directed scholastic thought into new channels and to new sources, rather than gave any original contributions to European knowledge. Saracenic learning was more brilliant, but did not have the same deep sources and organic connection with the whole social system possessed by scholasticism. It did not take deep enough root to be perennial." Page 36.

The part of this Greek culture that most amazed and delighted the European world was the work of Aristotle, especially his logic. The minds of Europe were fascinated by the discovery, and they became absorbed in expounding and analyzing their new treasures and in applying the Aristotelian forms of thought. But while this occupied the foreground of attention for a time, the old-new sciences that the Saracens fostered and advanced,— both pure and applied science, mathematics, and natural philosophy,— were of equal importance. They waited, however, for adequate development, owing to causes that will be apparent as we proceed. Saracenic schools were vigorous and attractive; they magnetized the northern Europeans who repaired to them and influenced the Christian schools that sprang up beside them. The students of the new learning were becoming scholars who were to be heard from. Among the schools of the Saracens were noted universities at leading centers. They offered a broad education and were so successful and influential that Christendom felt it must oppose itself to them in self defense,— an opposition that resulted in suppressing this rampant Saracenic education about 1200 A. D.[5] Something must fill the gap in higher education.

Crusades, travel, discoveries.— We must also appreciate the liberalizing and stimulating force of the crusades, and of travels, discoveries, and other influences that opened minds, encouraged fresh thought, and suggested wider relations in various directions. Again more settled times, following incursion and invasion, the settling of the new and the fusing of new and old into new nations, gave opportunities for new thought and new lines of development. But it is quite as important for our purpose to notice two phenomena that were in part caused by circumstances already noted.[6]

Growth of cities.— With the growth of civilization, the stimulus of more settled times, and the opening up of new trade routes, old cities came into new life and new cities grew. More

[5] This revival was ascribed to the Arabs. They were certainly partly responsible for this reviving scholarship. But the new acquisitions were due also to a generally reviving scholarship and to a consequent spirit of exploration in the field of ancient treasures. See also Rashdall, *op. cit.*, I: 68.

[6] Laurie, *op. cit.*, 95.

than this, they became more or less independent factors. Taking advantage of the financial stress of crusaders they wrested from their feudal lords, secular or ecclesiastic, charters and privileges, and in other ways made themselves separate organizations or associations that were to be reckoned with.[7] They developed a tendency to break away from ecclesiastic schools and establish schools better calculated to meet their needs, the forerunners of modern public schools.

Guilds.— Another form of association is seen in the trade guilds that grew out of conditions already suggested and were a commercial convenience, or even necessity, before other forms of federation had developed; for nations were not strong enough to protect their frontiers; international law was in its crudest form, and tariff unions had not been thought of. As civilization advanced and became more complex, trades became differentiated and these trade guilds were evolved, forming, in a way, independent industrial units, as the cities and leagues were independent social and commercial units. All were associations for mutual protection and for advancing mutual interests.

Specialization.— Again it is evident that with the new stimulus, new thought, new inventions and discoveries, new studies,— in short with the general advance of the growing times that have been briefly characterized, there would be larger accumulations of knowledge suggesting differentiation and specialization. The expert and the scholar would inevitably appear.

[7] This growth of cities was one of the most remarkable phenomena of this age, and the one that eventually had the most important bearing on education. So alert and vigorous were townsmen that they took advantage of every circumstance to increase the strength and importance of cities. On the one hand kings and feudal lords favored them. The city's industrial development and general wealth-producing power increased the value and importance of fiefs. On the other hand, as men's minds were occupied with wars, which were almost continuous, the towns escaped notice and in a way stole a march on their superior authorities. They grew stronger and fixed a few more pegs in their position, as in Germany. See Fisher, Outlines of Universal History, 281. Art and general culture found easier growth in these wide-awake and flourishing towns. The towns also fostered democratic tendencies, for the government was generally of the type of a commonwealth.

In noting these changes and in tracing their effects in schools it is of the utmost importance to keep in mind the exceptional schools mentioned in the last chapter,— some, perhaps all of them, representing a continuous tradition from old Roman times. Here enterprising study and teaching were carried on, and students frequently flocked to them in great numbers, sometimes in immense numbers, drawn by the reputation of scholars who made their temporary or permanent home there. Here were taught the liberal arts, and doors were open to the world. Some of these schools became more or less detached from ecclesiasticism and its organization and thus more or less independent institutions. A "studium publicum" was developing.

Private initiative.— It is true of practically all great enterprises that private initiative and private effort lay the foundations. It was to be expected that scholars and experts would push out into a kind of independence, under the educational conditions that have been referred to. Constantine lectured on medicine at Salerno, Inerius on law at Bologna, Abelard on theology at Paris. The latter was attached more closely to ecclesiastical institutions than the other two, yet in spirit belonged to their number. Their lectures were open to all. What more natural than that these scholastic gatherings should form centers about which teachers in all known arts and sciences should gather, and that they should organize for mutual benefit and support.

Rise of a new school.— Just this occurred. An association of teachers and scholars was formed, entirely free from ecclesiastic and civil control and open to all the world. It was a natural growth, not an artificial creation of some superimposed authority. It made its own laws and governed its own adherents in all things, independently of the civil community in which it was located. In a way it was a new order, but one that was not limited and confined as other orders. It had not even a charter. It was self-created and found its end in itself. But both ecclesiastic and civil authorities saw its importance, gave it place, and even courted it. This organization with these simple characteristics was the University,—

a veritable studium publicum.[8] A new school form had come into existence. It began before Saracenic schools went down, and because of this loss it multiplied the more rapidly.

The university a fusion. Due to various influences.— The Homeric poems represent a fusion of older ballad elements under the influence of a new spirit, though we hardly know how the fusion took place. So the university represents a fusion of various educational movements and ideas, though we can hardly explain how it came about. From the Saracenic movement and the exceptional men of the monasteries came the scholarship and models for successful schools of advanced grade. From advancing knowledge in various lines, accumulating new and more complex material, came the need of specialists and experts. From the few great schools, like the Cathedral School of Paris, came examples of brilliant scholars and thronging students. From cities, leagues, and guilds came models of free and independent associations. All were necessary for the product.[9]

The new scholarship first centers on the classics, then on logic.— One of the first results of the new ideals of scholarship in European universities was a more enterprising study of classical literature ("grammar," in the larger sense) that was now coming back to something of its pristine vigor. But from what was said as to the ideals of the period we are prepared to find that in the curriculum fostered by the new school-form the incidence of effort eventually fell on logic rather than on grammar. Logic was the center and almost the substance of school work. University scholars steeped themselves in it; even school boys aped it. The university curriculum was grammar, rhetoric,[10] and logic, with logic as the element which gave consistency and direction and meaning to all. The classics were pushed aside and grammar was made a boy's task.[11] Logic now became more than a formal

[8] Because the new school was open to the world the first distinctive name was Studium Generale, Laurie, *op. cit.*, 173.

[9] See Laurie, *op. cit.*, 87 ff., 91 ff.; Savigny, Amer. Jour. of Educ., 22:273 ff.; Howard, Evolution of the Univ., 5 ff.; Compayre, Abelard, 5, 6, 28, 33; Rashdall, *op. cit.*, I:50; II:150 f.; Stedman, Oxford, Its Life and Schools, 3, 4.

[10] Meagre, bare and formal, rather than cultural.

[11] In the Middle Ages Latin was regarded as an instrument for the

and perfunctory study. It developed life,— was made concrete. It was one of the most conspicuous experiments in concentration ever inaugurated.[12]

Contrast with the previous period.— This school curriculum, it will be noted, was the same in name as that given for the preceding period. The difference lay, on the one hand, in emphasis, organization, and application, on the other hand, in spirit or essence. The religious tone that characterized the earlier epoch was gone. A secular spirit had settled down on the new education. Both periods, probably, had tended to reduce knowledge of the Bible to a minimum. At any rate the university trained priest, "unless he was a theologian or a canonist, was not supposed to know anything of the Bible except what was contained in his missal and breviary."[13]

This was the initial curriculum of the university — the "arts course." Beyond it was the M. A. work in philosophy, and the graduate work in the professions.

"Requirements for admission."— The requirements for undertaking the "arts course" were few and simple. An elementary knowledge of grammar (i. e. Latin grammar), which may safely be interpreted as a knowledge of grammar in the ordinary sense, together with ability to read and write simple Latin and to use Latin in common conversation, admitted one to the university.[14] It would thus seem to be equivalent to admitting to our universities students who have a corresponding knowledge of English.[15] The preparation was often superficial. In the fourteenth century it was a "mere smattering of the rules of Priscian and Donatus." As one author picturesquely puts it, the boy,

expression of thought rather than an instrument of mental discipline. Particularly was this true in the epoch under consideration. Clark, *op. cit.*, 58.

[12] Rashdall, *op. cit.*, I: 70; II: 484, 486, 497, 600–1, 674; Ziegler, *op. cit.*, 32; Laurie, Renaissance and the School, (School Rev. 4: 207 ff.); Rise and Const. of Univ., 268; Compayre, Abelard, 68; 191–3; Paulsen, German Univ., 20; Mullinger, Univ. of Camb., 252, 254.

[13] Rashdall, *op. cit.*, II: 700–1.

[14] Rashdall, *op. cit.*, I: 201; II: 594 ff.; Mullinger, Univ. Cambridge, 369.

[15] Results were equally as disappointing as results now in English, and for similar reasons,— lack of life and real pedagogical work in teaching the subject.

"as soon as he had learned the rules of grammar and the vocabulary of conversational Latin in ordinary use, hastened to acquire the subtle and unliterary jargon that would enable him to hold his own in the arena of the schools." [16]

This is hardly a scientific statement, but from what has been said the general practice is fairly clear. Testimony as to the standard of entrance requirements seems definite and conclusive.

The preparatory school.— Many of the pupils who thronged the university were so poorly prepared that the university was obliged in self-defense to establish preparatory schools [17] of its own within its own precincts. This is a commentary not only on the character of the outside schools, but on the popularity of the university. Thus began a university influence that was far and long reaching. The preparatory school provided for a third grade of instruction inside the university, so that the "arts course" became the center of the organization.

Aim and method.— The aim or ideal of this new school was not so much to add to the sum of knowledge, or even to develop power to do this in the post-graduate world, as to get possession and give possession of old knowledge from a new point of view, and to formulate. In the undergraduate schools the ideal resolved itself into the mastery of standard textbooks by a new process that involved 1, painstaking and minute analysis of the work to be studied; 2, the interpretation and logical formulation of all parts that suggested pros and cons;

[16] Rashdall, *op. cit.*, I: 68.

[17] These schools were sometimes called *paedagogia.*

It would seem that grammar schools readily clustered around the university. In fact, the university was once no more than a grammar school itself. The seat of a university was sometimes, if not always, preoccupied by grammar schools. These grammar schools often came under the jurisdiction of the university; sometimes they remained distinct with a "Magister Glomeriae" at the head of the organization. The exact state of things appears to be far from clear. The university preparatory school, it would seem, was sometimes a special creation of the university, sometimes one of these convenient grammar schools absorbed by the university. It would be interesting to know whether the university ever "affiliated" a grammar school. It looks somewhat as though the schools of the Magister Glomeriae were of this sort. See Mullinger, Univ. of Cambridge, 140, 340–3; Brodrick, Oxford, 1–70; Rashdall, *op. cit.*, II: 597–8, 603; Paulsen, *op. cit.*, 20; Laurie, School Review, 4: 207 ff.

3, voluminous note taking and the "getting up" of notes; 4, accurate recitation. As a whole, at its best, it carried with it great thoroughness,[18] but it often fell below this best. Much of this was new to the schools. But old elements of method were found side by side with it,— dictation (for books were still scarce), copying, recopying, memory work (that probably included much rote-learning),[19] practice exercises, and the practical use of Latin in school-home and school-room. Preparatory schools probably used the old method that has been described in previous chapters, the main points of which appear in the statement just made as to old elements of method. But even they did not escape the dialectic furor.[20] "Fellows" of the university might "pose" school boys in the refectory, before they were allowed to enjoy the meal, and the boys of the school at a much later date gathered in formal or informal groups and argued points of grammar till the controversy grew so warm that satchels served for arguments. Logic was everywhere, therefore, the characteristic feature of method, as well as a subject of study.[21]

Equipment.— The surroundings of education still showed monastic simplicity and severity. The boys sat on grass-strewn floors and were led or forced by stern discipline.[22] It is interesting to note also that pupil-teaching was a well-established feature in the organization of instruction.

The first degree.— An examination marked the close of

[18] Scholastic education, says Rashdall, at least aimed at getting at the bottom of things. Though words were allowed to take the place of things, they were not allowed to take the place of thought. See Rashdall, *op. cit.*, II: 705–6; Compayre, Abelard, 167 ff.

[19] Verse-grammars appear as early as the 13th century. This was a concession to rote-learning, as verse made grammar easier to "commit to memory." Laurie, *op. cit.*, 269 ff.; Rashdall, *op. cit.*, II: 627, 649. Rules regulating minute points of method were sometimes made. See Rashdall, *op. cit.*, II: 438 f.

[20] Rashdall, *op. cit.*, II: 497, 603; Eggleston, Transit of Civilization, 260.

[21] On the general subject of method see Mullinger, Univ. of Camb., 159, 359–60, 371–2; Rashdall, *op. cit.*, I: 433–4, II: 497; Conf. I: 248 ff.; Paulsen, *op. cit.*, 22 ff.; Compayre, Abelard, 170, 188–9; Laurie, *op. cit.*, 269 ff., 272, 282. A good sketch of a grammar school method, which we may assume represented the maximum and not the average of the period for the secondary school, is given by Rashdall, *op. cit.*, II: 603. For a more detailed account of method see Appendix 1–6.

[22] Rashdall, *op. cit.*, I: 438; II: 605 ff., 665 ff.; Compayre, Abelard, 170.

the first stage of university study. Those who successfully completed it received the first degree, which in the early history of the university represented no fixed time limits, but later came to signify the successful completion of a four-year curriculum. At the beginning, as in more modern times, it often represented little serious study. University student habits persisted through centuries.[23]

Such was the new school. It was a distinctive one. But with all that was new and attractive there was still much that was bare, formal, and superficial.[24] Quite possibly it outdid the schools of the last period in some of these particulars.

The "arts course" of a secondary nature.—We must not be misled here by the term *university*. In the early university we evidently have still largely to do with secondary education. The preparatory department was of course secondary, or better, tertiary.[25] The "arts course," i. e., all below the M. A., or graduate, work, was also plainly secondary. The studies were secondary studies. Apparently very elementary work was done in them.[26] It was only as he entered on his M. A. study that the student really came into the province of university or higher education. But the most convincing evidence of the secondary nature of university education is the age of

[23] There has recently been a decided growth in the amount of effective study in university education.

[24] Rashdall, *op. cit.*, II: 595; Laurie, *op. cit.*, 273; Paulsen, *op. cit.*, 21 f.; London Quar. Rev. 58: 524 ff. Conf. Milton's characterization of university inheritances from this age,—Laurie, Educ. Opin. from the Renais., 172–3; Appendix 1: 7.

[25] Mullinger's statement (Univ. of Camb., 369) that the standard of admission varied from a moderate knowledge of grammar to the complete trivium, might seem at variance with this conclusion, but this evidently means, if it applied to the mediæval period exclusively, that more advanced preparation admitted to more advanced work, or to the professional schools, though, in the unsystematized condition of education, it may mean that standards varied very much in the secondary schools.

[26] Mullinger (Univ. of Camb., 340–1) says that the complete trivium followed by the more formidable quadrivium was far beyond the ambitions and resources of the ordinary scholar. His aim was to enter orders and gain the title of "Sir," and to obtain a license to teach Latin, for which the qualifications were slight and the degree of "master of grammar" was sufficient. See Rashdall, *op. cit.*, II: 598 f. Such degrees continued to be given for some time after the rise of universities. Grammar work was of a very elementary character, which certainly suggested secondary work.

the boys. It was the secondary age. Boys entered the university in the early years of adolescence, ranging from thirteen to sixteen. In fact the first degree might be taken as early as fourteen. "Boys in their teens chattered Aristotle." If we add the preparatory boys, who might enter the university as early as eight or nine, the boyish nature of a part of university life is still further emphasized.[27] The university found to its cost that it was concerned with secondary pupils. University freedom worked havoc among them, which doubtless gave a strong argument for the establishment of "hospitia," or "colleges," which were at first simply halls of monastic type where boys might be under the surveillance of principal or supervisor and get the benefit of his direction, advice, and discipline.[28] With the *"college"* came more individual work with students. In time it became convenient to have most of the instruction there.

Monastic and episcopal schools.— Side by side with the university existed the old monastic and episcopal schools.[29] They offered a secondary curriculum similar in name, and sometimes even equal in scope, to that of the university. But sometimes, at least in the earlier period, the regular trivium faded almost to the vanishing point, and this was probably one of the circumstances that forced preparatory schools on the universities.[30] The decadence is a tribute also to the popularity of the universities.

Their method.— The general character of the training in these schools was bound to be colored by their regular associations and their history, but it is probable that they partook, in greater or less degree, of the prevailing method, and logicalized their courses.[31] Here again the prerequisite for undertaking the work was mere school boy preparation of an extremely elementary character, as shown in the last chapter. These

[27] Compayre, Abelard, 191; Paulsen, German Educ., 25–6; see Rashdall, *op. cit.*, I: 479, 492; II: 484–6, 497, 704.

[28] Compayre, Abelard, 191–4; Rashdall, *op. cit.*, I: 482 ff.

[29] Compayre, *op. cit.*, 5–8; Mullinger, *op. cit.*, 68–70, 207–8; Nohle, *op. cit.*, 19; Rashdall, *op. cit.*, II: 601.

[30] See Mullinger, *op. cit.*, 70, 161, 207–8.

[31] "The one stimulating and interesting morsel which a monastic teacher could place before a hungry intellect was a morsel of logic,"—Rashdall, *op. cit.*, I: 38.

facts would seem to strengthen the position taken as to the "secondary" nature of the introductory university work, the "arts course." [32]

In addition to the two secondary schools already referred to we find a third, modeled after the second but owing allegiance to a different authority.[33] This, however, must form the subject of a separate chapter.

Summary.— We have then for this period a secondary school scheme that may be summarized as follows:

Aim: — Knowledge rather than culture; discussion rather than application. Knowledge and intellectual activity have become ends in themselves.[34]

Curriculum[35]: — Latin grammar,— Donatus, Priscian, Alexander de Villa Dei.[36]

Vergil, Cicero, etc., read, but to interpret grammar.

Logic, the central feature monopolizing attention.

Rhetoric, small amount, bare, formal.[37]

[32] Laurie, *op. cit.*, 269, remarks of the early university course that it was no better than Bernard of Chartres was giving.

[33] The city school.

[34] Rashdall, *op. cit.*, II: 692; Nohle, *op. cit.*, 13–14; Laurie, *op. cit.*, 269 ff., 272–3; Compayre, *op. cit.*, 167 ff.

[35] See Mullinger, *op. cit.*, 57–8, 99, 100, 140, 167, 205–6, 238, 298, 325–7, 340–3, 349 ff.; Compayre, *op. cit.*, 175 f., 182; Rashdall, *op. cit.*, I: 63–72, 433–37; II: 137–8, 571, 651, 674; Laurie, *op. cit.*, 269, 274, 281; Nohle, *op. cit.*, 13 ff.; De Montmorency, *op. cit.*, 75–77; Paulsen, German Educ., Chap. III. But conf. Rashdall, *op. cit.*, I: 243.

[36] Priscian's grammar at the hands of Alexander de Villa Dei was put into verse form to make committing more palatable. It was based, in part at least, on mediæval Latin, showing that the language was alive and growing. See Clark, *op. cit.*, 59.

Grammar was still an insistent study, but it was not so much an end in itself, the sum of discipline. It was regarded as a means to Latin disputation, an unwelcome, but necessary introduction to the rich fields of logic. Soon it sank into an end in itself again. Greek also is to be noticed as one of the studies of the scholastic period. But it was a study for the few and could hardly be properly regarded as a secondary subject. It has been called the most important element in scholastic contributions to education, but it could be so regarded only in the sense that the University called it, or began to call it, to men's attention. It took its place in the secondary curriculum only at a much later date. There were, however, exceptional schools. Greek was spoken in Southern Italy and in Spain as late as the time of the Norman Conquest. There were even Greek schools. Old customs lingered in secluded places. See Clark, *op. cit.*, 36 ff.

[37] Mathematics and rhetoric were of so little moment that they were

Method: — 1. The mastering of elementary Latin by old methods, including dictation, note work, and practice. 2. The thorough mastering of standard text-books gained by accurate learning of their content. Memorizing was prominent, but notes elucidating the text were numerous and were carefully learned. Rhetoric and logic were studied from epitomes. The former consisted of a collection of formal rules and hence was hardly a source of literary inspiration. 3. Vigorous and formal discussion of the content of books. It is evident that interest centered in method rather than in content, except in the case of logic, which is itself method and form rather than content. Method was thus, from all points of view, the supreme object of study.[38]

Results: —Altogether the period stands for reproduction, formulation, and method, not acquisition by experiment and discovery.

Shifting of aims and ideals during the period.— But it was not all as simple and definite as it would appear from this scheme. At different stages in the epoch there was a shifting of aims, ideals and programs.[39] The scheme here given was simply the typical one of the period.

Evaluation of the period.— Doubtless the university period often violated what are to us some of the most obvious pedagogical principles. There was much bareness, considering the culture value of the material and the form through which the boys were taken toward the post-secondary goal. Students often found themselves beyond their depth, because order, method, and curriculum were not adapted to them. The great

used for holiday treats,— which was perhaps a fortunate circumstance for producing interest, unless they were used as the strenuous Sturm later used his Sunday tasks. See Rashdall, *op. cit.*, II: 674.

[38] Various points as to method may be found in the following references: — Mullinger, *op. cit.*, 359–60, 370–71; Rashdall, *op. cit.*, I: 433; II: 497, 597–8, 603; Compayre, *op. cit.*, 167 ff.; Hazlitt, Schools, Schoolmasters, and School-books, 14; Laurie, *op. cit.*, 272, 282; Paulsen German Univ., 22 ff.; Do., German Education, Chapter III; Appendix 1: 5. Lower schools copied university methods. University students, as pointed out in the text, were often mere boys studying the elements. All in all the main trend in secondary school method is rather clear.

[39] Something of this shifting was noted on page 218. But there was more than this. A brief description of three well-marked periods will be found in Appendix 2.

discovery of the day filled men's minds and they gave little scientific thought to the pedagogy of its attainment. Milton feelingly complains of the inadequacy of university education of his day,[40] though it was fresher and probably more efficient then than later. But in spite of all errors there was a broadening of outlook, a breaking away from forms and limits that cramped the intellect of the previous period, and a quickening and sharpening of thought better represented by such estimates as the following:

"In a sense mediæval education was too practical; it trained pure intellect, gave habits of labor, subtlety, heroic industry, and intense application, but it left uncultivated imagination, taste, and sense of beauty; it trained to think rather than to enjoy." [41]

There must have been an interest, an enthusiasm, that had no raison d'être before. We can feel it even at this distance. There was thus produced an alertness and acuteness that prepared the way for revising educational material and developing more fruitful educational ideas. As Laurie says, the contrast with the "dead uniformity of previous centuries" was noticeable.

In this intense occupation it is perhaps not strange that the emotional side of life was neglected and that religion sank to a mere intellectual shadow or hardly that.[42]

The university thus spread a certain kind of training, and its ideals were so conspicuous and so well known that a great impress was made.

It will be worth while in conclusion to note the scope of educational interest and refer to some specific contributions of the period that have not yet been indicated.

How far education extended among the people.— In spite of the enthusiasm that the new education excited, and the large number of students attracted by it, few, relatively speaking, participated in the privileges of the schools, and of these the majority got little or nothing of learning or culture,

[40] See Appendix 1:6.

[41] Rashdall, *op. cit.*, II: 707; see also London Quarterly Review, 58: 524 ff.; Laurie, *op. cit.*, 273–4; Rashdall, *op cit.*, II: 596, 707.

[42] Rashdall, *op. cit.*, 692–3, 700–1. See Appendix 1:7.

because of lack of disposition or lack of preparation or both. Among the general population education in the eleventh century was almost entirely neglected. Under Lanfranc, it is said, the Normans received the first rudiments of literature. Before this, under the "Six Dukes of Normandy," "scarce any Norman devoted himself to liberal studies." For the people education was about what it had been for some time.

Some contributions of the period. **1. Growth of Latin.**— The period contributed noticeably to the growth of the Latin language. Latin was still the language of the schools, and in a degree the language of life,[43] — a living language. It is well in this connection to recall the fact that one of the most popular grammars for centuries (that of Alexander de Villa Dei) was based on mediæval Latin. Notwithstanding the neglect of "grammar" and of classical Latin, the demands that came from new ideas reacted on Latin in such a way as to add new vigor to its life; it was put to new uses and had to express new thoughts and be moulded to new forms. Vocabulary was thus increased and scope and power of expression were enlarged. "The Latin language," says Rashdall, "originally rigid, inflexible, poor in vocabulary, and almost incapable of expressing a philosophical idea, became, in the hands of mediæval thinkers, flexible, subtle and elastic."[44] Later, Latin as a living language was killed "by the Ciceronian pedantry of the sixteenth and seventeenth centuries."[45] But modern languages were soon to grow, and Latin could not hope long to be a living language, even in philosophy.

2. Latin literature.— There were some additions to Latin literature during the period, though it was conspicuously a non-creative age in general. The *Troilus of Albertus Standensis*, the *Catenæ Goliardi*, the *Gesta Romanorum*, and metrical romances and annals, indicate that the history of Latin literature cannot pass over the period in silence; but the *typical literary productions* were rhymed lives of the saints and metrical chronicles, together with formulations of theological dogma.[46]

[43] Ordericus Vitalis, I: 423; II: 40; Clark, *op. cit.*, 38–40.
[44] Rashdall, *op. cit.*, II: 596.
[45] See Clark, *op. cit.*, 35, 108–9; Rashdall, *op. cit.*, II: 596.
[46] We should also note the preparation of a new grammar which was

3. **Text book idea.**— The idea of text-books, as already shown, was very prominent, because one of the typical school tasks was the mastering of certain standard books that were precious because of their scarcity.

4. **Construing.**— Construing, begun before the period, became a stereotyped element of method at this time and has persisted almost to the present time. It fitted admirably the analytical tendency that was so conspicuous, and hence impressed itself deeply on the schools.

5. **Gradation of schools.**— The gradation of schools received more attention. Certain requirements were established for passing from one grade to another, certain tests were given, and certain signs [47] and symbols marked the fulfilment of the requirements. Thus the ideas of examinations, curriculum, and degrees became fixed in education.

6. **Reformers** — Modern pedagogical writers began to appear. A few men were giving expression to their insight into better things in method and matter. The tremendous intellectual activity that was rife was bound to yield some results in this direction. Pedagogical writing, it is true, did not serve to alter the character of method at the time; there was not enough of it to have much effect on the actual practice of the day; but it foreshadowed a new era in education.[48]

The period looks modern.— The early university period in many ways looks modern rather than mediæval. It broke away from the forms of the past. It was laying the foundation for still further advance. Some characteristic details of the time seem puerile and have excited ridicule and disparagement, but we must judge the period by its trend. Looking behind the underbrush that skirts the period we discover substantial services. We shall define the period a little more closely and, perhaps, symbolically, if we single out its most

a favorite for so long,— in fact to the 16th century. This was the grammar of Alexander de Villa Dei mentioned before.

[47] Of these signs or symbols there were four,— the degrees of M. G., A. B., A. M., and the Doctorate. The first, however, soon disappeared.

[48] In this connection it may be interesting to carry the topic one step further and note a contribution of the University proper, as distinguished from its Secondary department. See Appendix 1 : 7.

characteristic services, which will come more clearly to view by comparison with other epochs.

A brief survey of the contributions of previous epochs.— Primitive civilization developed the rudiments of our secondary curriculum. The story method of imparting and the process of memorizing appeared. As far as concerned education, rote-learning was seized upon instinctively as the one necessary feature of the educational process, agreeing, as we have seen, with the race ideal that made the integrity of the tribe and the perpetuation of its ideas supreme. Outside of formal education, however, there was, of course, much that was natural and concrete.

The next epoch developed in full form, and finally in great detail, the linguistic part of the curriculum. It also introduced mathematics in the form of geometry and arithmetic. To geometry it gave remarkable development. Arithmetic it left in crude and cumbrous form that remained till modern times. In the direction of method the period instinctively turned to objective work in number, wrought out the abstract method in mathematics, and the formal or classical scheme of language teaching.[49] At the same time it developed the dialectic mode of approaching a subject, though this remained a minor element of method in the schools for many centuries.

The next period was a transition one. New forces had entered the educational field,— those represented by the pedagogy of the Gospels. They influenced education at first only in a narrow and limited way, though in an impressive manner and with important results. They worked themselves out more fully later. In the schools it was a period that mingled new and old without producing any decisive form.

In the fourth period, representing the centuries between 500 and 1000 A. D., the religious school was developed, a formal religious element was added to the curriculum, and older elements were minimized. Method became bare and formal.

Services of the present epoch. General.— What then

[49] It should be remembered that this, in the epoch of its development, included much that was concrete, as seen in Chapter IX. In later epochs, however, this dropped out, and the "classical method" became purely abstract and formal.

shall we say the period now under discussion added to general education? Old emphases were abandoned,— even religion was slighted, and everything was made subordinate and subservient to the new subject, logic, which, though developed centuries before, now first came to be a regular school subject, and a secondary school subject at that.[50] In pedagogics the analytic and syllogistic method appeared and held the field.

Special — The preparatory school.— The characteristic contributions of the period of early universities, however, seem to lie in other directions. It developed the *preparatory school.* Old grammar schools became "feeders"; but, particularly, the university took within its precincts and under its jurisdiction a preparatory school of its own that played a large part till the last century, and even now holds its place in certain quarters where conditions similar to those that gave it birth exist, or where a certain educational exclusiveness is desired.

A secondary school in name, as well as in fact.— The school of the young adolescent for the first time in a thousand years became a secondary school and became such in a new and more definite manner; there had grown up above it a new institution thoroughly organized and far more distinct from it than the old "rhetorical" school, as distinguished from the "grammar" school; for rhetorical training was but a continuation of the grammar training, and the lines of demarcation were so indefinite that they were often lost sight of.[51] This making of the university a fully distinct and separate institution, with new aims and new methods, and the attachment of the older school to it as a preparatory school was a notable event in the education of that time.[52] More pointed and potent than before became the influence of the higher school on the lower. Aims, curriculum, and method were modified and

[50] The logic of Quintilian was a far different study and was also a correlated subject.

[51] Note Quintilian's complaint in Book I of his "Institutes."

[52] Of course the new relation was not uniform, for there were variations and changes as time wore on. There are epochs in the development of this relation that will be considered later. But what has been said is a fair characterization of the whole period. This special relation of university and secondary school continued its influence to the dawn of the 20th century. See Mullinger, *op. cit.*, 369. Compare the case here with that mentioned by Quintilian.

toned by the ideals of the more advanced institution. As time went on relations grew, if anything, more exacting. At any rate they were felt more keenly, even to the point of restiveness, till the situation came to seem so unnatural that a conflict for emancipation was inevitable.

Scholarship.— But there is one other thing that perhaps characterized the period better than anything else, because it went deeper and extended farther. The period developed for modern times the idea of *scholarship*. However crude it may appear, a genuine idea of scholarship began to show itself. The world sadly needed the ideal.[53]

APPENDIX I

1. **A time of genuine classical enthusiasm.**— Rashdall's statement here is significant,—"for about half a century (twelfth century), classical Latin was taught, not merely to young boys but to advanced students, in at least one school of Mediæval France, as later it was taught in universities of the Reformation and the Jesuit colleges. Latin was taught in a thorough classical way. Lectures covered pretty much the whole field of classical Latin." The method was as follows: — 1. Questions on parsing, scansion, construction, grammatical figures, and oratorical tropes, illustrated in the passage read; 2, varieties of phraseology noticed; different ways in which this or that thought was expressed were pointed out; the whole diction was subjected to elaborate and exhaustive analysis; 3, comments on subject matter, enlarging on allusions to physical and ethical points; 4, the next morning pupils were required under severe penalties to repeat what was learned the day before; 5, daily practice in Latin composition, prose and verse, in imitation of special classical models; 6, frequent conversations or discussions on given subjects with a view to acquiring fluency and elegance of diction. This description represents the idea of John of Salisbury. In his *Metalogicus* he tries to vindicate the claims of grammar and philology. He recognizes the bareness of logical training for minds ignorant of everything else.

But scholasticism "would none" of this revived classicism; it was crowded out relentlessly. See Rashdall, *op. cit.*, 63 f.

2. Bernard of Chartres' school taught grammar or rhetoric less mechanically. Attention was given to correct Latinity. Cicero and Quintilian were studied as models, and there was a wide acquaintance with Roman literature.

3. **Construing, parsing, discussing.**— In the grammar school the

[53] "The great work of the university was the consecration of learning." Rashdall, *op. cit.*, II, 692–3, 707.

rudiments of a classical education were taught in much the same way as at present, says Rashdall, II. 603. Donatus and Alexander de Villa Dei were the grammars. After the Psalms were learned they took up Cato, then Ovid and Vergil. In the absence of dictionaries the master construed to pupils and then required them to construe. In England books were construed into French as well as into English. There were questions on parsing, disputations in grammar, examinations in prose and verse. All this stopped when the students entered the university. No more classical books were construed. Little was heard of compositions. There were now lectures on grammar and similar subjects.

We must not, however, be misled, by these limited citations, into thinking that the movement as a whole was limited. Neither must we persuade ourselves that these and similar references represented the typical method.

The typical method for the university seems to have been a bare and formal one still, with the interest of real things and substance less in evidence than before. 1. Standard grammars were dictated, explained, memorized. Donatus, Priscian, and Alexander de Villa Dei were the favorite grammars,—the two latter in verse. Vergil, Cicero, etc., were read, but to illustrate grammar. 2. There was discussion (syllogistic) on grammatical points. With the exception of 2 the method was perhaps very similar to that of the previous period:—a barren method. Logic and rhetoric were studied from epitomes. Rhetoric was regarded as a collection of formal rules rather than a source of literary training and a concrete subject. Latin was still used for communication.

4. **Method in the university.**—It is interesting to note more in detail the method inside the university, which in part, it must be remembered, was merely a secondary school. (A) Minute analysis of a book down to the initial sentence or thought; paraphrasing of the sentence for better presentation of the meaning; comments and explanations; students took copious notes, copied, recopied, revised, "got up." (B) Author's thought, where practicable, cast in the form in which it might serve as subject matter for the all-prevailing logic of the day; questions formulated and argued pro and con; work in this connection often, probably, catechetical in form; master then suggested his interpretation and defended syllogistically. Another account of method (in advanced work) makes dictation, discussion, reproduction characteristic features.

5. **Method regulated by statute.**—It is interesting to note that sometimes they attempted to regulate method by statute. Boys in "arts" were required to sit on the ground instead of on benches, which had apparently come into vogue. Other statutes required masters to lecture extempore instead of reading or dictating. They even prescribed the exact flow of words—"to speak as rapidly as though no one were writing before them."—Rashdall, *op. cit.*, I; 438.

6. **An estimate of university training.**— Milton, Tractate, 1644. Quoted by Laurie, Hist. of Educ. Opinion, 172–3: —

"I deem it to be an old error of universities not yet well recovered from the scholastick grossness of barbarous ages, that instead of beginning with arts most easie and that be such as are most obvious to the sense, they present their young unmatriculated novices, at first coming, with the most intellective abstractions of logick and Metaphysicks; so that they, having but newly left those grammatick flats and shallows where they stuck unreasonably to learn a few words with lamentable construction, and now on the sudden transported under another climate to be tossed and turmoiled with their unballasted wits in fadomless and unquiet deeps of controversie, do for the most part grow into hatred and contempt of learning, mocked and deluded all this while with ragged notions and babblements, while they expected worthy and delightful knowledge."

In the rhetorical presentation of general impressions by such men as Milton and Luther there is no place for the exceptional that of course existed. But we are after the average, not the exceptional.

7. **Results in higher reaches of learning.**— In the higher reaches of knowledge the result was the formulation and crystallization of past acquisitions handed on by the early Christian centuries and the early mediæval years. Hence came, on the one hand, the development of dogma that culminated in the science of theology, and, on the other, the growth of the sciences of medicine and mathematics, of geography and physics.[54] The typical method was that of syllogistic reasoning, derived from the rediscovered Aristotle,— a restored dialectic. Aristotle thus became Christianized, or rather theologized. This was scholasticism, but it applied more to the advanced work of the university than to the secondary departments. As a matter of fact, however, scholasticism was older than the university.

APPENDIX II

CHANGES IN AIMS AND IDEALS WITHIN THE UNIVERSITY PERIOD

In the twelfth century, before the University had worked out its typical forms, grammar was the center and almost the substance of the University curriculum, and grammar students and grammar teachers were most conspicuous for some time. The University at this time abounded in "grammar schools." Amid comparative quiet in the political world grammar, which stood for learning, revived and had a

[54] See passages in Chapter XIII and the early part of Chapter XIV, dealing with enterprising work in science, etc., particularly in Spain. For an example of differentiated geography see Georgii Fovnier e Societate Jesu Gegraphica Orbis Notitia per Litora Maris et Ripas Fluuiorum. Parisiis MDCXLIX. This book was published somewhat later than the period under review, but it shows how matters had been tending.

real classical treatment. By the term grammar we are of course to understand grammar in its ancient comprehensive sense. It was a classical revival of genuine spirit and enterprise. The Roman poets and orators flourished in the schools. Grammar therefore assumed its old-time place as a regular, not an exceptional, occurrence. See Appendix I: 1, 2, and Rashdall, *op. cit.*, I, 63–64.

Just then, however, the new treasure, logic, came to light, or rather to new light. "Grammar" was dethroned and the new subject was set up in its place and received the incidence of attention in the schools. As mentioned in the text the classics were neglected and grammar became a primary task. (Rashdall I, 68.) Latin was regarded as an expression of thought, rather than an instrument of discipline (Clark, 58).

But an idea unchanged becomes monotonous. Methods and ideals so pronounced, so specific, and so formal, as was the case in "scholasticism," became outworn as exclusive educational forces. Men's minds reached out for new objects of study and effort. It should also be said that the gains of the passing epoch prepared students to push out more profitably into the new. The early university type gave way before a revolutionary movement. The new movement, however, represented a revival and transformation of an old phase of education, rather than the creation of a new one. In the absence of contemporary culture-material men turned to that of the past. For a time, however, the movement did in spirit represent a new ideal. So the University epoch shades into the Renaissance. Here is some evidence of the awakening: —

In the fourteenth century there was almost universal ignorance of grammar, and Richard de Bury began to make books (Mullinger, *op. cit.*, 205–6). Soon Oxford and Cambridge established schools for the special purpose of developing grammar teaching, and more modern textbooks followed (Hazlitt, *op. cit.*, 14, 84). Rashdall, *op. cit.*, II: 514, 570–1, is interesting in this connection. In all this history Italy must be excepted; the traditions stimulated more genuine culture there and gave a more generous place to mathematics and science, Nohle, *op. cit.*, 14–21; Mullinger, *op. cit.*, 345; Rashdall, *op. cit.*, I: 249.

XIV

FOUNDATIONS OF A NEW SECONDARY SCHOOL

Results of practical needs and practical politics in the "University Period."— Influences at work in the "University Period" led to notable developments in other directions. Side by side with the Universities, and almost coincident with them, there was developed another educational institution. It grew out of the same educational conditions which produced the University,[1] but it was the result of a very different combination of forces and influences and represented different ends and purposes. It was a response to the practical demands of the times. Practical needs of life, and particularly practical politics, produced it. As life and life's outlook [2] broadened under the conditions previously discussed, and as trade and cities grew, men felt the need of a school nearer to and more dependent on the center of life. A study of ancient forms also must give way to, or be supplemented by, studies that would give practical preparation for the commercial and industrial life of the day. Ecclesiastical education must be supplemented by secular education. The disadvantage of distant schools conducted by monasteries, often remote from sections of the growing cities, must be remedied by the establishment of local schools nearer the pupils' homes.[3] Cities, which had originally made a close circle around the monasteries as centers had probably spread at will as other than religious influences drew them, as trade in other directions occupied them, and as the protection of the monasteries, which were fortresses as well as shrines, was no longer needed. Again, foreign school

[1] See early pages of Chapter XIII and particularly those dealing with the growth of cities.
[2] See Chap. XIII. Conf. Chap. XV.
[3] Nohle, in Report of U. S. Com. of Educ., 1897–8, I: 21 ff.

authorities hardly in sympathy with the new city demands must be replaced by authority vested in the city itself.[4]

Independence in school management inevitable.— The feeling of independence developed in city life was sure to carry with it independence in school management. The city itself must be its own school authority; only by such an arrangement could the feeling of dignity be kept intact, and strong and vigorous. Above all, the city needed some means of establishing and perpetuating a civic ideal on which its well-being depended.

A city school.— Owing to all these influences, owing perhaps particularly to the last, came the "City School," which appeared about 1250 A. D. It is evident that it represented a very different motive from that which called forth the specialized and specializing university.[5]

A difference in name rather than in fact, at first.— The movement for city schools was not, however, a simple one. At first the main thought seems to have been on the name, rather than on the curriculum. It naturally used the only model it had,— the monastic or cathedral school, from which it differed little, if at all, in general outline.[6] It adopted the only style of educational clothes it knew. It formed in time, however, a center for national culture, as contrasted with ancient or foreign culture, and it paved the way for the state school.[7] Because at first it was a copy, and a copy of a school already studied, we need not stay to speak at length of it here.

Schools of private associations. The vernacular. The new arithmetic and algebra.— Soon a parallel movement started that gave expression to the more practical side of life, and brought in practical subjects like the vernacular and com-

[4] The "scholasticus" had gained supreme power in education, and, as school income from fees was an appreciable item in finances, he was jealous of his position. Some petty school contests resulted from attempts of plain citizens to push their educational plans, but the vigorous action of the cities, which were young and virile, regularly won the point, or at least secured a compromise. Nohle, *op. cit.*, 21–22.

[5] Ziegler, *op. cit.*, 33–38; Nohle, *op. cit.*, 18–22; Paulsen, German Educ., 28 f.

[6] Nohle, *op. cit.*, 23.

[7] Beginning in the 16th century.

mercial arithmetic.[8] The latter subject was advanced in importance by special schools of arithmetic[9] fostered and maintained by private commercial associations. The new arithmetic, however, made way slowly. The old Greek and Roman method, with its cumbrous notation and objective reckoning by hand counters or abacus, died slowly. The new arithmetic was characterized by the Hindoo (or Arabic) notation, ease of computation and representation, and consequent rapidity of action.[10] The party that advocated the new-old Hindoo notation and "written arithmetic," with its short graphic processes, in place of the old and bungling concrete or objective arithmetic, was opposed by the party that clung to the hallowed symbols of the past, so fully incorporated in church thought, church decoration, and church forms. The monasteries were the last to give in.[11] It may be said also that Algebra was rising, or that the foundations for it were being laid, as was natural after the advent of the new symbolic arithmetic. The great text-books of Ben Ezra and Leonardo were soon to come.

Again, there were general guild schools supplied by mediæval guilds, apart from regular city schools. They may have emphasized industrial subjects, at least at a little later period. But for a time their curriculum was probably the same, or much the same, as that of the common church school. That the practical idea must have grown slowly is shown by the fact that even a guild had its religious forms and employed priests to say masses for its benefit. It was through these priests that the school was originally carried on. The growth of such schools is exemplified by the Merchant Tailors' School, which still exists and now squares its curriculum with modern requirements.[12]

[8] Nohle, *op. cit.*, 24. Great apprehension was aroused by these intruders. Men felt that schools were going wrong by thus departing from traditions. See Green, Town Life in Fifteenth Century, II: 12 ff.

[9] Fink, Brief History of Mathematics.

[10] Presses now became busy with primary books on "Algorism."

[11] The new arithmetic undoubtedly simplified work, but, in the absence of practical pedagogy, it tended to make arithmetic abstract. The valuable element in the old arithmetic, its concreteness, was so far lost that it took the drastic reforms of Pestalozzi and others to make it concrete and adapt the subject to children's need.

[12] See also Ziegler, *op. cit.*, 33 ff. Conf. Leach, Eng. Schools at the Reformation.

Three schools, all illustrating the new spirit.— It will be seen that the new times thus present a double or triple movement: 1. The *City Latin School* modeled on the existing secondary school, but destined to grow very slowly out of that model, to modify its curriculum, reluctantly, but surely, and finally to emerge as the gymnasium. 2. The *Vernacular School,* at this time an elementary school, but in time to send out a secondary branch with modern languages and modern science as the basis of its curriculum. 3. The *Guild School,* a representative of private education.[13] The first, as already indicated, dates from 1250 A. D. It spread so rapidly that in Germany at the end of the mediæval period there was hardly an important town that had not established such a school through its City Council. The second dates from 1350, the third perhaps from 1150.

Studies and methods.— A summary of the secondary [14] curriculum for the schools we are dealing with [15] would show that, aside from the two points noted above, there was practically no change from the general forms of the time, which have been given in detail in previous chapters.[16] Latin was the great preparatory subject, and logic gave flavor to the whole. The trivium, with the emphasis on the third member, formed the typical secondary curriculum. Methods were the characteristic ones noted before. Hence, aside from a possible touch of the practical in these city schools, the aim showed no divergence from those with which we are already familiar.[17] Still, if we go beneath the surface we can feel the movement towards culture for secular positions and secular life, in addition to that for ecclesiastical functions.[18]

Real significance of the new school.— The immediate curriculum and method, which show so little divergence from the old, therefore, are not the significant features in the case. We

[13] Leach, *op. cit.,* 34 ff.; Nohle, *op. cit.,* 21 ff.

[14] The new commercial and practical ideals showed themselves more distinctly in the elementary schools.

[15] The early university period extending to the Renaissance.

[16] The real innovations in the curriculum were probably most conspicuous in primary schools.

[17] Nohle, *op. cit.,* 19 f., 23–25; Laurie, *op. cit.,* 95 f.

[18] Ziegler, *op. cit.,* 33 ff.

must look rather at the source of the movement and at the new authority in education, and we must note that a new direction was given to education and a new ideal introduced. The significant feature therefore is that other interests, besides the ecclesiastical, felt the need of education, because of the insufficiency of the natural education of imitation and apprenticeship. Communities became too large and too specialized to be satisfied with the old order. Accumulations of knowledge, new and old, must be made accessible to a wider school public. Schools were therefore to be adapted to the needs of more than one profession and occupation. This principle once started must in time materially change ideas as to appropriate school subjects and methods, and it did, as will appear in a later chapter.

For the first time since Roman times we have a school organization that supplies the surest principles of growth. Henceforth secondary education is to come more out of the life of the people. These schools from their freer and more sensitive position and relations were thus the main hope for such responsive changes in school practices and policies as the times might require.

XV

SECONDARY EDUCATION OF THE EARLY RENAISSANCE

Rising and falling waves of imagination.— The Greek and Roman periods afforded favorable conditions for the development of the imagination in various forms; for imagination has as many forms as life has interests. The succeeding centuries confined thought and imagination within very narrow limits. Aside from a very limited use of the imagination in connection with the spread of Christianity they busied themselves with mastering forms and words, giving prominence to memory work. Imagination in these centuries recurred to the primitive and sensuous type.[1] The early university age was absorbed with sharpening the intellect, sharpening rather than cultivating it. It was however refashioning and whetting a tool which would accelerate creative work in following ages.

But imagination cannot be permanently ignored. The next period saw it bud and bloom again in as great profusion as ever. There was a freshness, spontaneity, and even exuberance about it that have always won admiration. It showed its broader functioning. It was the richer for the new power that intervening centuries had developed, for it not only gives to every other power, it takes something from each,— which is only another way of saying that it is a form, an association, rather than an independent power. This new epoch is not merely interesting psychologically, it is especially interesting because of the important place it occupied in establishing secondary school forms and policies.

A new intellectual awakening.— The scholastic age, as we have seen, contributed something that in a marked way distinguished and separated the age from those that preceded. But the new interests then developed became outworn in the course

[1] This should not be considered a disparagement. It was a natural step in the evolution of a new ideal.

of the centuries that saw the early universities grow into power. The mind is never long satisfied with old forms and material. It must work from a new point of view or busy itself with new creations. Forceful human predispositions and endowments will supply their own conditions of development and will find appropriate outlets or fields of action. The last part of the scholastic age quite naturally developed a restless spirit that longed for new substance on which to use the new tools that it had prepared, longed for new aims and new inspiration beyond the abstract forms of logic. It found them, but the substance was an old substance revived, and the inspiration was that which came surging into minds from the wonderful discovery of ancient treasures. There was a rebound from what had become flavorless and tedious, and the rebound made a new epoch in which various intellectual processes, and among them imagination, started into a fresh and broader life. It was a renaissance of both intellect and spirit.

The Renaissance. Only an episode in a larger renaissance.— This Renaissance of the centuries beginning somewhat earlier than 1400 A. D. was but an episode of a larger renaissance beginning much earlier. New ideals came into life and education in the early Christian centuries and needed time for rooting before the new and the old could fuse and nourish one another in a newer and stronger civilization. This time of preparation was so poor in what the world had regarded as culture that when culture re-emerged in a more settled Christian civilization it seemed a veritable renaissance. But there were several flashes of brighter intellectual activity on the way,— a series of births and re-births. That of the fifteenth century seems the brightest and most persistent. Yet it is probable that those preceding it in Spain, in France, in Italy, and later in various other countries, had no less vital influence. In such an evolution there are luminous epochs, but no culmination. A renaissance is rather a phase or phenomenon than a noumenon. Charlemagne's and Alfred's brief work and the new activity coming into Europe through Saracenic culture and study and through the early universities were thus as truly renaissances as the one we have now reached.

Many forces at work.— The growth in insight and outlook,

in power of assimilation and appreciation, may sometimes be very gradual, even imperceptible; again they may be accelerated by certain fortunate conditions, either individual or national, through which the influence of opposing and obscuring forces is largely annulled; they may be facilitated by a clearer view of ideals and more practical methods of realizing them that come at more lucid intervals when experiments can be carried on by inspired agents not hampered by tradition nor thwarted or deflected by conservative forces; they may come by cataclysm. Such fortunate plannings, discoveries, applications, and even forcings are as much a part of evolution as the slower processes of nature. They are a part of nature. All renaissances probably present these several types of movement. Such was the nature of the awakening after the sleep of ancient culture. We simply mark the latter by capitalizing the word. It is distinguished from the others by its intensity and because it stands at the confluence of two streams of science and culture, one coming down from the Orient and Greece through the Arabs in Spain, the other coming more directly from Greece and Rome through Italy and the Revival.[2]

A broad movement.— Ideally and typically a renaissance has to do with the awakening of the mind generally, with new insight into life in all directions. We have perhaps allowed our minds to center on the imaginative features of the new age, and more expressly on the esthetic development that was conspicuous in the direction of literature and art.[3] Indeed, conditions were ripe for the development of a keener art spirit than had been manifest for many centuries. But to confine ourselves to this phase of the Renaissance is to view it from only one angle. It was much larger than this.

The Renaissance was at first reasonably true to the broad type that has been referred to, encouraging a broadening of thought in many lines. But for some time, after the first

[2] The latter represented a double descent: — 1. Italians became more vigorously conscious of the culture and culture material that had remained in their midst, originally derived in part from Greek influence, in part, however, from original and masterful qualities in the Romans themselves. 2. The dispersion of scholars, on the fall of Constantinople, brought to the West new contributions of Greek culture.

[3] There was marvellous development in other directions.

enthusiasm had settled into more formal thought and mood, it spent its force in studying the past and in interpreting and adapting past achievements. It therefore gave a fresh view in a single direction and became a narrow movement. It was so almost by accident. Even thus it prepared the way for a richer movement that will be considered in later chapters.[4] It will be worth while to note the causes of this narrower development and to study its results.

Immediate occasion of the Renaissance.— Conditions and antecedents of the Renaissance were those circumstances or forces whose influences have been traced in the awakenings of the university movement and in the spread of city schools.[5] The immediate occasion was the Revival of Learning. At different periods, and in limited areas or circles, men had caught views of the culture material of the ancient world, particularly the ancient Roman world.[6] But in the fifteenth century they began, in a larger and more vital way, to study, and to draw inspiration from, the ancient classics of both classic nations. Content of classic literature entranced as it had not, except in rare instances, since Roman days, and had rarely done even then. Spirit ruled and form retired as a paramount object of effort and study. The new movement began in Italy where the old masterpieces had remained in sight and where everything suggested the old days. But it soon spread. Everywhere the lodestone of interest, or the supreme object of effort, especially educational effort, was the old classic culture-material. The story has often been told, how the new interest spread and what favor, even furor, was aroused by the new studies. It need only be suggested here.

The central interest.— As the idea of culture, in contrast with bare church service and the practical ideals of the later university period, came to the front in the literary products of the only well known cultured nations, young Europe made a supreme effort to take intellectual possession of this literature, now designated as the *ancient classics*.[7] Linguistic study thus

[4] See Chapters XVIII–XX.
[5] See Chapters XIII and XIV.
[6] See Chap. XIII and Appendix 6 of that chapter.
[7] "The study of language became the common bond between the literary and religious promoters of the Revival in the 15th and 16th

became the absorbing occupation of scholars and would-be scholars, and eventually monopolized the energies of the schools.

A psychologic phenomenon; not dependent upon Latin and Greek.— If the classics had been completely lost, mental activity would have occupied itself elsewhere with remarkable results, and would have achieved genuine culture. The Renaissance was, par excellence, a psychological phenomenon, a genuine mind-awakening. We have been misled by taking certain sequences, conditions, and occasions as causes. Professor Laurie says, with a good deal of justice, that the Renaissance was not dependent upon Latin and Greek for its origin or its permanence, and he calls attention to the fact that, long before this, Europe had begun to seek original expression for its own view of human life in the indigenous literary products of Germanic nations.[8] Each epoch, however, needs to stand on the shoulders of the past in order to get a fairer outlook and make the best headway. Progress would be wastefully slow if each new period had to work out everything from the beginning from its own view-point. The form and content of Latin and Greek literature were a great inheritance and ought to have led more quickly to a new creative epoch. But unfortunately men became so absorbed in the old that they forgot the new. The assimilative process extended beyond all reasonable limits.

Two contrasted parts of the Renaissance period.— The Renaissance was not a homogeneous period. It had two phases, an earlier and a later, strikingly different in aim and

centuries. A barbarous and monkish Latinity was the vehicle of a barbarous and monkish conception of life. We cannot separate language and thought. Hence the identification of the Humanistic Revival, literary and esthetic, with the study of Latin and Greek,— the two great vehicles of literature and art common to the European world. Hence too the identification of the revival of a pure Christianity with the critical study of the same languages and of Hebrew." Laurie,— Studies in the History of Educational Opinion from the Renaissance, page 13.

[8] The Niebelungenlied is based upon primitive ballads. The Song of Roland, The Cid, The Kalevala, and other epic literature of Western Europe rest upon, and have grown out of, a stratum of ballad literature. In the present case the natural literary development of Europe early became obscured by the borrowed development of classic nations, and had little influence, or, at any rate, only a late influence.

characteristics. The early Renaissance was characterized by the spontaneity, freshness, and enthusiasm of early contact with classic culture. The mind as a whole was stimulated; the outlook was a broad one; many interests drew attention, so that the mind went out actively in many directions. It is important here to notice again that Latin was still a living language. It was an instrument of thought, not an instrument[9] of discipline. The scholastic epoch had given it new power and made it a great force in life, as already noted,[10] but it had narrowed its use to a single interest. The Renaissance brought back to Latin its many-sidedness, as interests were manifold and Latin was the natural means of communication for all. The language was thus adapting itself to new thought and expression in many directions. Goliardi moulded it in mediæval songs.[11] Erasmus used his powerful influence to make Latin the language of the schools and give it a development consonant with the times, as seen in his compositions for school use.[12] Latin was thus an active, vital force. Altogether it is evident that the period was one of enthusiastic outlook. The Renaissance mind had not yet turned in upon itself.

Typical secondary school of the early period. Its aim.— The school that represents this phase of the Renaissance is that of Vittorino da Feltre. His curriculum and method were thoroughly humanistic. His ideal was the old Greco-Roman ideal transfused by Christian thought,—

"the penetration of Christian life with classical culture." As amplified in Woodward's monograph the ideal was the "harmonious development of mind, body, and character, actualized in young men who were to serve God in church and state in whatever position they should be called upon to occupy;" and the author adds (perhaps with some exaggeration that a general statement couched in rhetorical terms is liable to involve), "scholars persuaded themselves that style could fulfil the function of religious

[9] Clark, *op. cit.*, 57.
"The relation of Latin to the needs of various classes explains its prominence at the time of the Reformation. Everywhere men actually needed it,— read, wrote, and to a large extent spoke and, perhaps, thought in Latin."— Leach, *op. cit.*, 105.
[10] See Chapter XIII.
[11] Clark, *op. cit.*, 40, 41, 68.
[12] Clark, *op. cit.*, 82 ff. Erasmus in a way marks the end of this development of Latin.

instinct, that argument and illustration drawn from an authoritative past and driven home by exhortation, couched in classical literary form, could serve as a spiritual force to the individual life."

With our waning regard for the classics, and particularly with our broadening ideas of education, we can hardly appreciate those older teachers' estimates of the study of the classics as an instrument for developing multifold power and an all-round man.

The details of Da Feltre's school are very interesting. They show how far the educational world had traveled since mediævalism defined its school forms. A summary under the three usual heads will serve to focus thought on the characteristic features of his school and give us a fair idea of its scope.

Da Feltre's school: —

Ideal: —

The penetration of the Christian life with classical culture, or the harmonious development of mind, body and character. The aim was to send forth young men who should serve God in church and state in whatever position they should be called upon to occupy.[13]

Curriculum: —

Latin,— the central language; medium of instruction. Greek,— taken up early. Composition, — systematic graded course.	Language and literature the core of the curriculum. The chief factors in education. All else subordinate or ancillary.
Arithmetic. Geometry, with elements of Algebra. Astronomy.	Valued by Da Feltre as the only exact knowledge we possess, and as the finest possible stimulus to exact thought. Geometry probably the favorite, and of course taught through Euclid; but general principles were regarded as all that was essential. "Too much devotion to the abstract side" was thought "a form of trifling." Algebra barely alluded to.

Natural philosophy (probably including geography). A kind of key to nature allusions found in literature.

[13] See Woodward.

Natural History.— Perhaps the "Bestiary" would well define the idea here. Men were interested in accounts of strange animals and plants, and color beauties in stones. The substance of natural history was probably a collection of interesting and marvellous items about natural objects. These subjects were regarded as an aid to vocabulary-building.

History.— For ethical values and for insight into customs and national virtues.

Philosophy,— chiefly ethics, particularly Stoic ethics.

Logic or dialectic.

Morals.

Religious instruction.— The whole course of training in a religious setting. "The dignity of human lips is based on their relation to the Divine."

Physical training,— both for hygiene and for culture. The Greek ideal of the harmonious development of mind and body added to the Roman practical ideal of a sound mind in a sound body.

Music,— admitted sparingly. Severer melodies favored. Compare with ideas of Plato and Aristotle. See Chapter VI.

General Method: —

Books few; oral work predominated. Text dictated, construed, translated. Notes given, to be copied by the pupil. Oral questions. Lectures.

The pupil also came into account. Da Feltre studied the taste and capacity of each pupil, took note of his proposed career, and adapted his method accordingly, while ample variation in subjects gave him the means of keeping up the interest.

Special method in language: —

Grammar not yet "crystallized into authoritative rule and usage, but still largely a matter of induction." A small manual of accidence in question and answer form might be used, but otherwise grammatical usage was gathered from a study of the authors. A many-sided knowledge must be secured before the regular reading of the authors for themselves began: — 1. A vocabulary by dictation, with the chief inflections. 2. Easy passages from the poets explained, probably translated, and used for exercises in accidence. 3. A similar course in historical narrative and moral anecdote, with stress on subject matter, in connection with elementary composition and disputation. 4. Accent, quantity, enunciation were essential features of every lesson. An important means of gaining

language and language style was constant practice in composition.[14]

Grammar was fundamental, though not the formal propaedeutic it finally became. But the narrow idea of grammar as a fundamental subject introductory to literature was growing, and even here was being laid the foundation of the idea that "grammar is the essential instrument of teaching, and that its study lies at the root of all intellectual progress."[15]

The edifice of letters was built on this grammatical foundation. Here comes in Quintilian's idea of the "explication" of literature, including meaning and construction of words, and a study of style and allusions. Parallel teaching of Latin and Greek was practiced.

Special method in physical training: —

Formal gymnastic exercise, and the spontaneous exercise of games.

Special method in morals: —

Morals not a formal study in the course, but enforced by correlation and environment. Corporal punishment not a factor of method here. Aside from the ethical influence of the curriculum, character was formed by sustained personal influence and supervision. An active, healthy, happy school, with clearly defined ethical character was the ideal, thus furnishing the best conditions for character building.

It is evident from this summary that Latin was becoming fixed in the curriculum, and that grammar was assuming its special rôle as a fundamental in the course.

We must not be misled by terms here, and think that Da Feltre's school was more advanced than it really was. The work in what we now call advanced subjects was probably very elementary. Secondary and higher sections of the school were doubtless as indefinite as in Quintilian's time, but it is easy to see that the basal elements of this outline represent a true secondary school and that the pupils in substantial numbers were secondary pupils. We should remember again, however, that the school was of the European type, which takes boys earlier and keeps them later than American secondary schools.

Other typical spirits of the early Renaissance.— This school was an expression of the early Renaissance spirit. Da Feltre was not alone, though he perhaps represented the

[14] Conf. Quintilian. [15] See Woodward.

period in its purest form. Æneas Sylvius, Guarino, and others belonged to the same type of educators,[16]— those who were reinstating secondary education. This enterprising educational work is a striking indication of the fact that the ideal and social status of the teacher were rising,[17] and that education in all its branches was taking on new life and getting a clearer view of its larger functions.

Prototypes of this school, with comparisons.— It can hardly escape notice that the first conspicuous schools of the Revival were copies of the best schools of old Rome, though permeated by Christian ideals. Such was Da Feltre's school. It is evident that we have in its spirit a stronger hint of Greek thought and aim than we find in Quintilian, but there is evident similarity between the two educators. There is similarity not merely in detail of plan and method, but in the general aim. Quintilian's ideal was a civic one. Da Feltre's was also civic, only of a broader type, as the times demanded. This early humanistic education was a preparation for Christian citizenship. Each teacher therefore was responsive to his times, as any true educator must be to do his work in an adequate manner. Da Feltre had grown as his times had grown. He lived in the present as well as in the past.

Such was the nature of the first period of the Renaissance, and such was the school that responded to its spirit. Spon-

[16] Woodward, *op. cit.*, and Ziegler, *op. cit.*, 45–48. Ziegler gives abstracts of Vergerius' "Good Morals and Liberal Studies," Vegius' "On the Training and Good Morals of Children," Sylvius' "Treatise on the Education of Children," Guarino's "The manner and Order of Teaching and Learning," most or all of which show a more interesting and a more vital pedogogy than ruled at the time.

[17] Da Feltre's ideal of the teacher was in strong contrast with the ideal of the previous period indicated by the following citation: —

"Let those teach who like disorder, noise, and squalor, who rejoice in the screams of the victim as the rod falls gayly, who are not happy unless they can terrify, flog, and torture. How then can teaching, be it of grammar or any of the liberal arts, be a fit occupation for honorable age? Quit so debasing a trade while chance offers. Pueros doceant qui majora non possunt, quibus mens tardior, sanguis gelidus, animus lucelli appetens negligens fastidii."

The language may be overwrought, but after all it shows the estimate of the genus teacher by the earliest humanists. It represents the past, however, rather than the future, though it probably does not come far from giving a fair picture of average school conditions as late as Luther's boyhood, and even much later.

taneity, interest, enthusiastic cheerfulness, and a belief in the influence of knowledge on life and character were characteristics of revived culture.

Elyot's school in England.— Italy was not alone in producing educators of the new type. About the time Da Feltre was working in Italy, England had an exponent of the lively Renaissance spirit in Elyot, who has given us his school plan in a book called the Governour,— a reduced Quintilian. In his curriculum English is to come before Latin, except as Latin is picked up by a natural method in early years (before 7). A few "quick rules of grammar" are followed by reading. The language is advanced by colloquial means. By fourteen the boy is to be familiar with the Æneid, parts of Lucian, Aristophanes, Homer, Vergil, Ovid, and Lucian. After this come logic (the "Topics"), rhetoric (Quintilian) and the orators, geography with maps, and history (in Livy, Cæsar, Sallust, and Xenophon). After seventeen the boy is to take up the first two books of Aristotle's Ethics, Cicero's De Officiis, and Plato. His idea of one great feature of method is tersely put, showing that he does not favor a burden of grammar as a preliminary:

> "It (grammar) in a manner mortyfyeth his courage, and by that time he cometh to the most sweet and pleasant reading of old authors the sparks of fervent desire of learning are extinct with the burden of grammar." His idea of a grammarian is well defined negatively in these words:—"I call not them grammarians (teachers) which only can teach and make rules whereby a child shall only learn to speak congruous Latin, or to make six verses standing on one foot, wherein perchance shall be neither sentence nor eloquence."

His grammarian is the broad literary man of Quintilian who teaches literature by what Laurie calls the best method ever produced,— but hardly the best that could be produced.

Here, then, was another great school in another part of the world. The schools which we get a glimpse of in this chapter, so far as they go, are immeasurably superior to those of a much later day, better than those of fifty years ago; better, shall we say, than many a great secondary school to-day.

Progress of the humanistic secondary school.— Humanism gradually spread over Europe. But as a rule the new life

with its marked characteristics of spontaneity and enthusiasm opened later in the North than in the South. In the North it depended on a center of diffusion far away. The Renaissance was an external force working its way in after missionary principles. In Italy it was an inner force working its way out. Again the North was, in a way, a non-cultural land. The marks and relics of culture bequeathed by an older civilization did not show themselves in profusion and richness as in the South, but the North soon felt in its more sluggish way what the South felt at the outset.[18]

[18] There were characteristic differences in the progress of the Renaissance in different countries, and the movement was of course not a simultaneous one in the different sections.

England was perhaps an exception to the slow response. From early days this country has been responsive to education and has had brilliant educational periods.

XVI

SECONDARY EDUCATION IN THE LATE RENAISSANCE

Later Renaissance compared with earlier.— The later Renaissance presents a striking contrast with the earlier epoch discussed in the last chapter, at least as far as concerns the substance of secondary instruction. We have already seen that in the early Renaissance language study not only was the basal work of the curriculum, but occupied the major part of the time, and that Latin was the language which claimed chief attention. Latin was then a living language and hence performed two functions in education. Now, however, Latin was passing as a living language. It had long lain outside the life of the masses, who spoke Teutonic dialects or a hybrid language formed of Latin and Teutonic elements that modified one another and then fused. The status of the masses was gradually rising, impelled by the forces and conditions that have been described in recent chapters. The vernaculars were thus assuming power and influence.[1] There was finally no need of teaching Latin for practical purposes at all, but the time was not yet.

Language is first of all a practical subject, and its development has depended upon practical considerations. At the outset every-day need was the controlling influence. Then a cultural aim suggested itself and added its peculiar force to the evolutionary process. The latter aim, however, is just as practical as the former, for it issues in real service, increasing both the efficiency and scope of language. The one aim produces a serviceable medium of communication, the other gives form as well as substance. Then came a pseudo-practical idea that

[1] In Germany, for instance, its condition was gradually improved till, in the outburst of the early German classic times, guided by the rare spirits of Lessing, Goethe, and Schiller, it triumphed for literary purposes also.

gave to language study the aim of formal discipline. It afforded small welcome and smaller opportunity to other aims. Under its sway Latin, losing the inspiration of the practical aims referred to, "became copy." From this time almost to the present the idea of formal discipline has been paramount on the foreign language side of secondary education, and it still holds a large place. While language is a practical subject, the teaching of language has generally come far short of being a practical matter.[2]

Status of Latin in the later Renaissance period.— In the later Renaissance period,— the sixteenth century,— Latin was still taught for certain practical purposes, at least for a time. Though it could no longer be called the vernacular for the people at large, it was still the language par excellence of the educated,— their medium of communication, both oral and written. Science, art, and literature still owned it as their language.[3] Vernaculars were still too far from a culture status to be considered as means or ends of educational plans. They were for the masses and did not come within the extended course of education that was only for the few who affiliated with the Latin element.[4]

The Latin language thus held men's gaze and efforts at this time because of what it was and what it contained, and because of its still existing practical relations. To be in the cultured circle, to be possessed of the means of communication between culture-centers, and to appreciate the content of which the language was the vehicle, one must possess the language. It was accordingly easy to lay supreme stress on language study and in effect make it an end.

Latin of the Golden Age now the aim.— Under these cir-

[2] In spite of much splendid work on the disciplinary side of language teaching it must be confessed that results in the direction of language power have not been at all commensurate with the energy expended.

[3] Leach, *op. cit.*, 105, says that everywhere men actually needed it, read it, wrote it, and to a large extent spoke and perhaps thought in it, as indicated in a previous note.

[4] There was a caste in language, as there has always been. Barriers shut out the newer and more practical. There have always been gentiles or barbarians in subjects of study as well as in peoples. The missionary linguist or the missionary philologian are not easily developed. Dialects destined to become strong cultural forces are left to grow up by themselves; a part of evolutionary machinery is withheld from them.

cumstances, when Latin was no longer a necessity in any such sense as during the period covered in the last chapter, it is not a long reach to a modification of the aim just noted in the direction of a particular phase of language study. There thus came an absorbing ambition to possess the language of the golden age of Latin development,— in fact to make youth like the Romans of Roman days.

Formal discipline.— So deep an impression did the idea make that, amid various vicissitudes, it can be traced as far down as the end of the nineteenth century. Now as soon as ends are narrowed in this way, and the acquisition of a special type of language becomes paramount, there is a tendency to formalize language teaching, because mechanical and formal methods seem the easiest way of mastering old forms. "What was a revelation to one generation becomes an unintelligible routine to the next." In the history of language teaching there will be found to be a regular rhythm between the culture idea and the form idea,— the latter obscuring the former, because, after all, the acquisition of language forms must occupy a large amount of attention. "Formal discipline" becomes an easy aim when language teaching occupies the chief place in a curriculum and when the language is no longer a living one. Correlatively formal teaching becomes an easy method. It is a commentary on the laissez faire spirit of the secondary school.

Textual movement.— Added to this natural tendency was the influence of the philological and textual movement that came during the second part of the Renaissance and made technical language and grammar study prominent. Scholars became interested in studying the history and relationships of languages and in deciding on fine points in text-criticism. To do this one must have a language eye for the minutest forms.[5]

Sturm's school a type.— These things will be more clearly understood from a concrete example of later Renaissance pedagogy. This is found in the school of John Sturm, of Strasburg, a typical school of the period.[6] For centuries it influenced the

[5] See Laurie, Hist. of Educ. Opinion from the Renaissance, 28 ff.

[6] There were other noted schools of the period, but this will probably best serve as the type, 1, because it comes nearer the tradition

ideals of secondary teaching. Fortunately we can get a somewhat more detailed outline of his plan than is practicable in many cases, for school programs quickly disappear. From the published letters of the great schoolmaster to his teachers we can make out not merely his general curriculum, but details for each class.[7]

It is significant that Sturm was a pupil of the Hieronymians. They were pioneers in absorbing the spirit of the Revival and in introducing into Northern Europe a new education,— new, because fused with new ideals and supplied with new and fresher material, and because dealing at first hand with inspiring wholes of literature instead of with bare epitomes[8] of great works of the past. But Sturm seems to have systematized and formalized what in his masters was freer and more spontaneous. He did it so successfully and with such éclat that his school was known far and wide. He attracted the notice even of kings and princes, who became his patrons in great numbers. His acquaintance was so extended and his personality so marked that, it is said, no diplomat passed through Strasburg without stopping to converse with him, and his advice and influence were sought in state politics.

In Sturm's mind the end of education was "piety, knowledge, and the art of speaking." But, as he saw that "knowledge and purity and elegance of diction distinguished the cultured from the uncultured," these became the aim of school discipline.

He laid out a curriculum for ten years of school life applying to boys from the age of six or seven up to their entrance upon university study, or some other tertiary curriculum. Only the last half of his curriculum can be regarded as secondary, but we need to look at the whole in order to appreciate the half. This is his scheme. As one reads he feels its intensity and its

which we are following; 2, because we have fuller details than for most schools. Other schools are noted in an appendix, and certain details have been given in regard to them that will be found useful in interpreting the new epoch. Some of these schools, it must be confessed, give hints of a more attractive pedagogy than ruled in Sturm's school, but they are not for that reason better types of the period.

[7] See the American Journal of Education, 4: 167, 401.

[8] Such epitomes as those of Capella, Isidore, and other encyclopædists and grammarians. See Chapter XII, Appendix.

really wonderful organization, and is impressed with the masterfulness of the teacher.

STURM'S SCHOOL PLAN.

(Uniform text-books throughout the school.[9])

Class 1.

The foundations: —

Forms and correct pronunciation of letters.
Reading,— better secured by teaching declensions and conjugations than by use of the catechism (showing that reading meant Latin reading, and giving a hint as to the text-books in reading which had been in vogue).
Spelling and writing.
German catechism committed to memory.

Class 2.

More thorough work in declensions and conjugations, including irregulars.
Latin vocabulary (large).— Names of common objects arranged in natural groups. Also short sentences and sayings. Pupils thus made their own dictionaries,— dictionaries of three departments.
German catechism.
Translation of modern Latin.[9]

Class 3.

Drill on past acquisitions.
Dictionary making enlarged.
More grammar, including etymology.
Translation of Cicero's letters, with constant reference to the grammar. Also translation of modern Latin.
German catechism.

Class 4.

Drill on past acquisitions.
Grammar,— Latin syntax.
Reading of Cicero's letters, Cato,[9] and modern Latin. Translation of Sunday sermons.
Style exercises (Latin), involving all the knowledge thus far gained.
German catechism translated into classical Latin.
Music.

[9] Cæsar was evidently not imposed on beginners. This text was probably included in the more advanced work of Class 8. It is interesting to see what books are chosen for early classes and to review our present customs in the light of Sturm's curriculum. Sturm was himself a prolific writer of new text-books.

Class 5.

Drill on past acquisitions.
Reading of Cicero's letters, Horace, Terence, Martial's epigrams, Book of Poetry, Sunday sermons.[10] On Sundays, reading of some letters of Hieronymus.[10] Translation of Latin catechism.
Greek begun.—Æsop's Fables.
Music.

Class 6.

Drill on past acquisitions.
Vocabulary again,— names of unfamiliar objects.
Reading of Cicero, Cato, Vergil, second Book of Poetry, Latin Catechism, Sunday sermons. On Saturdays and Sundays one epistle of the New Testament to be read and interpreted.[10]
Style exercises (Latin).
Technique of poetry. Verse writing. Practice in restoring meters, etc.
Mythology.
Greek continued.— Sunday sermons in Greek to be read.
Greek vocabulary building.

Class 7.

Drill on past acquisitions.
Boys now well provided with choice words and illustrations. Careful attention to be given to listening, interpreting, and repeating from memory.
Reading of Terence, Cicero, Horace. On Saturday and Sunday epistles[10] of the New Testament to be paraphrased from another's reading.
Style exercises (Latin).
Greek grammar and book of examples.— Æsop.

Class 8.

Drill on past acquisitions.
Rhetoric,— doubtless from Latin treatises.
Reading of Cicero's letters and Cluentius, Latin historians and poets, Demosthenes, Odyssey, Greek historians and poets. Epistles translated and committed to memory.
Retro-translation in both Latin and Greek,— doubtless Latin into Greek and vice versa.
Style exercises (Latin). Style must be incessantly practiced and improved.
Greek and Latin poems changed into different meters.
Composition of many poems and letters (of course in Latin).
Plays of Plautus and Terence acted, in Latin. (Sturm's school was equipped with a theater.)

[10] Undoubtedly all through the medium of Latin and Greek, so that even religious exercises served Sturm's great aim.

Class 9.

Interpretation of Greek and Latin authors.
Rhetoric, with Demosthenes and Cicero.
Iliad, one book.
Epistles learned and recited.
Relations between oratorical and poetical usage. Comparison between Greek and Latin here.
Exercises in style.
Dissertations composed and delivered in Latin.
Acting of plays of Plautus and Terence (in Latin), and a play of Aristophanes, Euripides, or Sophocles.
Logic.
Arithmetic.

Class 10.

Logic and rhetoric enlarged; applied to Demosthenes and Cicero. In this connection also Vergil and Homer are to be taken up.
Thucydides, Euripides, Sallust.
Facility in writing and declamation to be thoroughly cultivated.
Catechism and epistles to be expounded, and passages amplified, after the fashion of rhetoricians.
Astronomy.
Some propositions from one book of Euclid.

Special features of the school.— This outline gives a fair idea of Sturm's curriculum, and of substantial portions of his method as well. There was practically no modern language work except what was involved in studying Latin and Greek with a view to Sturm's rather narrow aim. There was no history (except in Greek and Latin), almost no science, and only a mere trifle of mathematics. The characteristic features of method were formal grammar work, dictation, copying, memorizing [11] (though in smaller amount than before, because of the growing number of printed books), incessant and vigorous practice in style exercises, reading of classic and modern authors in fragments not in wholes, and constant use of Latin in school work, in conversation, and in dramatic performances. Even this brief summary perhaps does Sturm more than justice, for, while there seems to be a considerable amount of reading in his curriculum, it is rather an episode in the technical work of composition and grammar, or a vehicle to take one over the road leading to a command of Ciceronian style, and yet it did give real contact with Latin and Greek authors.

[11] Laurie, *op. cit.*, 36.

Discipline.— The tension of this school is seen in Sturm's thought that boys should be kept under the discipline of the rod; "nor should they learn according to their own choice, but after the good pleasure of the teacher."

Comparison of Da Feltre, Sturm, and Quintilian.— As Da Feltre made prominent the humanism of Quintilian, so Sturm made prominent his formal practice and drill,— his disciplinary program. He was terribly in earnest; he was a master at defining aims with great distinctness, keeping them in the forefront of consciousness, and pursuing them persistently, not to say relentlessly; he was without a rival in organization. Yet we feel that his school was a travesty of Quintilian's, which he evidently made his model. We miss the broad culture ideal and humanism of the Roman school, which Da Feltre illustrated and really illuminated and improved, and we miss that vital relation to life that Quintilian always recognized and built upon.[12]

Sturm's school a culmination and a beginning.— Sturm's school is especially interesting from several points of view:— 1. As already indicated, it shows one side of Quintilian's plan of education as the later Renaissance interpreted (or distorted) it. 2. It represents a kind of culmination of the city school development discussed in a previous chapter; for it was the Gymnasium of Strasburg. 3. It represents the beginning of modern secondary school development in which the limits of secondary education had become rather clearly defined. Only a few years after Sturm's death the first secondary school in America was established. Sturm's was a type-school. The Jesuit secondary schools, which represented organized education for a long time,[13] were copies of this school, which they moulded to their purposes. The final development of Renaissance secondary education was thus the starting point for the modern period. So incisive was the work of Sturm's school, so conspicuous were its relations to the strongest forces in Christendom, that it was the commanding influence in second-

[12] Other schools apparently show less tension and less of the formal. See Appendix 1 (b).

[13] In fact they were the only examples of organized education, since other schools were isolated units rather than parts of a system.

ary education. Its importance is not realized fully till we take account of another impressive fact closely associated with the Renaissance, the remarkable multiplication of secondary schools.[14]

In the typical curriculum of the late Renaissance therefore Latin was far the largest element. Greek was a lagging minor. There was little else. Latin and Latin method overshadowed everything in Sturm's school. Hence a knowledge of method became a knowledge of Latin method. It was a phase of the so-called classical method that, with few changes, predominated for centuries.

Other Renaissance educators — The progressives.— The two types of school that we have been studying represent two views of education that had influence in their respective periods. But the Renaissance discloses noted names besides those already mentioned. Men with as keen insight into the educational process as that of Da Feltre, far keener than that of Sturm, who hardly knew education as a process, were formulating new principles and sometimes applying them in a limited way.[15] If we should generalize from these reformers we should get a third type for the period, a prophetic one, that must stand side by side with the schools of Da Feltre and Sturm. In Sturm's time, or in close proximity to it, we find advocacy of new studies, new books,[16] attention to things in place of words, mastery of language by use, regard for content and literary values, the use of the vernacular as the class-room medium of expression, individual investigation and discovery, new school houses, better qualifications for teaching,[17] more pedagogical

[14] See page 279.

[15] See Appendix 1 (a).

[16] See Hazlitt, *op. cit.*, Chapter IV ff. Appendix 3 to this chapter gives summaries of noted text-books of the period. Conf. De Montmorency, *op. cit.*, 75, and especially 77.

Bookseller John Dorne's account book, which has been preserved, shows that A B C books, primers, and new Latin textbooks were his "best sellers." Hazlitt, *op. cit.*, 87–8.

[17] Aside from much other evidence of pressure in this direction a movement for bettering conditions took definite form in Cambridge in 1441 in the establishment of a training school for grammar (Latin) teachers for the benefit, particularly, of country schools. Mulcaster was perhaps the first Englishman to raise his voice for making a profession of that which makes all other professions. See Quick, Educ. Ref., 100.

discipline. Noted reformers were stirring the school world by their applications of reformed pedagogy to teaching.[18] In the latter part of the nineteenth century, after centuries of waiting, the cumulative effect of all this, with more recent additions, appeared in the reluctant enrichment of the secondary school curriculum and method.

Some contrasted ideas.— Again, over against these progressive facts, must be placed others that are less attractive. Textbooks were still scarce and often not in the hands of pupils. It was necessary to have matter copied from dictation, then divided, construed, and explained (a bit of method inherited from scholasticism). Students took away great copy-books containing their acquisitions. Platter tells us that in studying Terence the teacher read, and pupils had to decline and conjugate every word of whole comedies. He himself had to learn Donatus by heart.[19] Even Melanchthon rings the changes on grammatical drill and advocates repeated journeys through the grammar, and the learning of all rules by heart. Luther, who speaks of learning as an "exercise of the memory, or a gladiatorial exercise," feelingly characterizes it as pitiable that a boy should spend many years only to learn bad Latin sufficient for becoming a priest and saying mass.[20] As to favorite books, he says that, next to monastic works, Terence and Plautus were studied, as the readiest means of learning colloquial Latin. He tells us that he himself, at Mansfield, learned some church passages, etc., Donatus, the child's grammar, and church music. Of "bacchant teachers," [21] who were frequently assistants in the schools, he declares that they neither loved nor understood the art of teaching better than they did the nature of true

[18] Rabelais' characterization of the old education and his enthusiastic presentation of the new show that a new order of things was pushing its way to the front. He typified the Renaissance spirit.

[19] Grammars have been thus "learned" in our schools within fifty years.

[20] Luther's Schools,— Amer. Jour. of Educ., 24: 99 ff.

[21] An appreciable element in the schools of the day was of a nomad nature. Youths roved the country, either as adventure students, moving at will from school to school, and characteristically protected from ordinary processes when they broke moral and civil law, or, more purposefully, seeking some subordinate employment in schools and church. Some of our present crudenesses in school customs are inheritances from the codes of this time. Amer. Jour. of Educ., 24: 90 ff., *et al.*

religion, whose servants they professed to be. They did not study the character and disposition of pupils, they taught mechanically, and they ruled by hard and brutal force. They presented a sombre appearance and lived in sombre surroundings, for they wore a dark monastic dress and occupied large buildings with gloomy cells. Referring to the character of education the same author informs us that in school life a large portion of each forenoon was devoted to the church, and again that little attention was given to what was taught, that not a single branch of study was taught as it should be, that everything still wore the garb of the Middle Ages, and that there were no experiments or observations in natural philosophy and no accurate criticism in language and history.[22] Erasmus exclaims as to the profound ignorance of teachers in general in such matters as geography and natural history, which were needed for the explanation of the classics.[23] Hallam makes the education of a gentleman of the first class in England at this time consist of reading, writing, considerable familiarity with French, and a slight tincture of Latin (though Leach adds that the French should probably be reduced and the Latin increased). One of our most prominent authorities sums up the case for Renaissance method in this way:

"For the ordinary boy, as for the ordinary teacher, school life, as distinguished from university life, was almost as dreary as ever. Grammar was the despot and rote-memory the slave. Verbalism again reasserted itself, though now, it is true, with higher aims so far as language was concerned. The attempt to introduce 'reál studies,' even history, broke down."[24]

All this was surely in sharp contrast with the work of the master teachers whose plans aroused such admiration. The work of the latter, it is true, best represented the new epoch, but

[22] Eggleston, *op. cit.*, 260–1, says that commercial subjects acted as intruders in the Latin schools as late as the middle of the 18th century. He might use similar language as to other subjects for a much later date.

[23] This is one of the most significant observations of the time. In earlier days (see Quintilian, who probably followed still older educators) it was a fixed practice to correlate the classics and other subjects needed for their "explicatio." The fact that even this correlated work is now lacking is strong evidence of the dwindling of curriculum ideals.

[24] See School Rev. 4: 209 ff.; Davidson, Hist. of Educ., 178–9.

they were outnumbered by school masters of smaller calibre and narrower attainments.[25] Representations of the period show the master dictating and the pupil copying.[26] This was an easy attitude to cover any deficiencies, and made teaching possible for persons of the most meagre equipment. Hazlitt says of England that the majority of masters and ushers perhaps needed interlinear helps. They served merely as a medium for conveying lessons found in treatises prepared by the more learned.[27]

State schools.— We have thus to consider several school ideals in the Renaissance centuries. There were also several school forms from the point of view of organization and relations to civic authorities. The period preceding the early universities developed a special type of school.[28] The church school was prominent everywhere and left no room for competition. This type still existed in the period we are studying, but it was now overshadowed by other school forms that the more independent spirit of succeeding centuries had developed. Conditions favored more spontaneity and more variety in school polity. More than once reference has been made to the part the more democratic spirit and the rising commercial ideas in the cities were playing in establishing schools and dictating educational policy. The city school thus became the prominent factor in public education.[29] But the idea of public control had now grown beyond this stage. State schools, the foreshadowing of state systems, began as early as 1550.[30] These schools, however, represented variety in form and organization rather than in ideals, studies, or methods. Any school, to have standing, must follow the type plan of the Renaissance in these respects.

In all these Renaissance movements, however, we must note that the real aim was not to emancipate schools from clerical

[25] See Leach, *op. cit.*, 103 ff.
[26] See frontispieces in favorite textbooks.
[27] Hazlitt, *op. cit.*, 29; conf. 112, 159.
[28] See Chap. XII.
[29] See Appendix 2, giving results of Leach's investigations as to English education of the period. Nohle, *op. cit.*, 29 ff., gives evidence that a similar state of things existed in Germany.
[30] Nohle, *op. cit.*, 32; De Montmorency, *op. cit.*, 67, 69 ff., 73, 75, 86, 102–3, 105, 191–96, 201. Prefaces to old text-books mentioned in the appendix show that even state text-books had come into use.

influence, but to broaden church schools and to add lay schools that should afford, for the rising non-clerical occupations and professions of a new civilization, a kind of training essential for their survival and growth.

APPENDIX I

(a) Some Reformers.

Agricola in his "De Formando Studio" inveighs against verbalism, advocates geography, botany, geology, etc., lays stress on the vernacular as a necessary antecedent to Latin work, and would have individual thought and investigation. He is at the same time inspired by the new enthusiasm for classical study. (See Mullinger, Camb., 411–12.)

Erasmus (1467–1536) was an acknowledged leader in the Renaissance. Some bits from his educational views come in well here. According to him the key to Latin method was the object lesson and the literary anecdote. Begin early, he says, when the imitative tendency is strong. It is good for the boy to be among talkative people. He learns more thoroughly and readily if the thing discussed is depicted, and the words are mastered because attached to a vivid object of thought. He would have tales from the classics and Æsop. Brief, pithy quotations and sayings of illustrious men are to be learned. As to grammar he says, "While I appreciate the necessity of this, I should wish it taught in the least possible compass and only what is best. I have never approved of the custom of keeping boys grinding at this subject for several years." He would teach Greek and Latin together, making them support one another. Reading Latin authors should begin as soon as possible. First should come Terence, whose style is pure, terse, colloquial, and whose subjects naturally interest the child. Some of the less objectional plays of Plautus might be added. Then should come (in this order) Vergil, Horace, Cicero, Cæsar. Sallust might join the list. These are sufficient for the mastery of Latin. (Clark, "Latin of the Middle Ages and Renaissance.")

We should note Erasmus' advocacy of geography, natural history, etc., but as an aid in the study of the classics. His general scheme reminds one of Quintilian.

Melanchthon (1497–1560) was perhaps the most indefatigable in making books and modernizing methods. His plan of teaching reminds one of Sturm.

Luther (1483–1546) and Zwingli (1484–1531) represented more advanced views in education than the times could digest. Physical training, the study of the vernacular, history and mathematics, and, in the direction of method, language by use, and things before words, were advocated by one or both of them. The toning of method may be judged by Luther's remark that in his time they could learn in "sport." This

would seem to us to be a strange characterization of such education as even the new times gave, but it serves to emphasize in our minds the drastic and unnatural education of earlier days with which Luther was contrasting current education. Luther was a pioneer also in arguing for universal education and for a gradation of schools. He found discouraging conditions into which he threw his new leaven. In a tract entitled "De Constituendis Scholis" he says, "Principio videmus per totam Germanã scolas collabi, gymnasia studiosorum infrequẽtia frigere, monasteria monarchis profugis deferi."

Trotzendorf (1490–1556) had an enterprising curriculum in Latin and Greek, involving the speaking of Latin exclusively and the writing of themes in classical Latin, logic and rhetoric based on Cicero, music, natural philosophy, and arithmetic (though it may be that the two latter came later,— really after the secondary curriculum. (See Neander.) In the early course in Harvard College arithmetic came in the senior year.

Trotzendorf is, however, particularly distinguished for his method and his enlightened ideas of government. A remarkable unity of feeling between pupil and teacher, a successful scheme of co-operation in school government that sounds modern, and pupil-teaching, show the vigor and resourcefulness of the man.

Rabelais (1483–1553) was perhaps more vigorous in his strictures on the old and his advocacy of better things than most leaders. He would add reál studies, teach objectively, and include physical culture and manual work in the program for the education of Pantagruel. His curriculum included Latin, Greek, Hebrew, Chaldee and Arabic, arithmetic, geometry, astronomy, the study of nature, and music. Comparing the education of the time with that of his youth he says, "the time then was not so proper and fit for learning as at present, neither had I plenty of such good masters as thou hast had, for that time was darksome, obscured with clouds of ignorance and savoring a little of the infelicity and calamity of the Goths, who had, wherever they set footing, destroyed all good literature, which in my age hath by the divine goodness been restored unto its former light and dignity, and that with such amendment and increase of knowledge that now hardly should I be admitted unto the first form of the little grammar school boys; I say I, who in my youthful days was (and that justly) reputed the most learned of that age. . . . I see the robbers, hangmen, adventurers, ostlers of to-day more learned than the doctors and preachers of my youth." See Quick, Educ. Reformers.

Neander (1525–1595) had an enterprising curriculum, including a wide course of reading in Latin, Greek and Hebrew, logic and rhetoric, physics, geography, and history, for which he made text books to suit himself. But the secondary period was given chiefly to Latin, Greek, Hebrew, and, at the very end of the period, logic and rhetoric, while the other studies waited till after the eighteenth year. The advance is shown in the new life in classical teaching, in the recognition of

new studies, which, though they came late in the curriculum, still could claim recognition, and in the questioning of the old.

Here came in also the great names of Montaigne (1533–1592), Ratke (1571–1655), and Comenius (1592–1670), who tried to bring into notice a curriculum better adapted to the needs of the times and to the nature of the individual to be educated. Thus the mother tongue, nature, science, and history were coming to view and winning some attention, while more concrete methods and a definite idea of pedagogical principles as a basis for method gave better conditions for interest in the educational process. Note, *e.g.,* Montaigne's advocacy of the mother tongue as the first object of attention, and of the study of things in place of words, and Comenius' devotion to objective work, to school organization, in which he provides for a well articulated school system, and to a more fruitful course of study in which history, geography, science, and mathematics are conspicuous.

(b) Some Special Schools and Schoolmasters.

Colet's School, St. Paul's, in which Lily was the great teacher. The school was Colet's in the sense that he founded it. He established a pure classical curriculum, but informed it with Renaissance ideas, as seen in his insistence that the aim should be "the very Roman tongue." In gaining this end, however, both modern and ancient authors were to be used. In accord with the better pedagogical ideas of the new times he also made method more pedagogical. "The best way to learn Latin," he says, "is by reading, and not by studying of the grammar,— by example, and not by committing rules to memory." St. Paul's was the first school in England to teach Greek.

Early in the next century we find this school enlarging the curriculum beyond the bounds left by mediæval scholasticism. An "Outline of Rhetoric for St. Paul's" was brought out in 1639.

The *Ipswich School,* under Woolsey, in 1483, offered a more enterprising curriculum than St. Paul's. It included a humanistic study of a wider range of literature; but it was a thorough classical school largely given to a study of Latin. Woolsey wrote a little treatise on the instruction of boys, giving his plan and method: —

Class 1: — Grammar,— the eight parts of speech.

Class 2: — The practical speaking of Latin. Some translation of both kinds, with a view to quality of thought in the English-Latin translation, and purity of accent in reading Latin.

Class 3: — Æsop and Terence, to form a familiar style. More grammar.

Class 4: — Vergil. More grammar, as to which he says, "But although I confess such things are necessary, yet as far as possible we could wish them so appointed as not to occupy the more valuable part of the day."

Class 5: — Cicero, seemingly with reference to style.

Class 6: — Cæsar and Sallust. Lily's syntax.

Class 7: — Horace and Ovid. Occasional composition of a verse or an epistle. Translation and retro-translation of verse. "Memory gems."

Class 8: —"Higher precepts of grammar." Donatus' figures, etc. Any ancient author whatever in the Latin tongue. Thorough treatment of the text, including technical points, beauties of style, etc. Careful attention to speech in the recreation hour. Occasionally "some pretty subject" for a short epistle in the vernacular. Formulæ to guide in theme writing.

Harsh discipline and all sorts of tyranny to be avoided; "for by this injurious treatment all sprightliness of genius either is destroyed or is at any rate considerably damaged."

At intervals attention should be relaxed and recreation introduced, but recreation of an elegant nature worthy of polite literature. "Even with his studies pleasure should be so intimately blended that a boy may think it rather a game of teaching than a task." He also cautions against overexertion, which overwhelms the faculties, and fatigue.

The curriculum of *George Buchanan* (1506–1587) covered six years and was given to a concentrated Latin and Greek course. Pupils spoke Latin and wrote a daily Latin theme. The first reading book was Terence, which was followed by Cicero, Ovid, Vergil, and Horace. Greek came in the fourth year.

Ascham (1515–1568), a noted English schoolmaster who divides honors with Sturm, was also a student of education. He studied famous methods and schemes of earlier days, and formulated one of his own which had so much good sense in it that it has found its way to our day. He was influenced by Sturm, or better he was a friend of Sturm. The influence was perhaps mutual. At any rate he was not a mere copyist, but a forceful investigator and originator. His observations as to Latin teaching have been used to inspire better teaching at the present time. Recently an American teacher has given distinction to a Latin book by quoting from Ascham with great approval.

Ascham advocated the comparative method of teaching Latin, which involved inductive features and gave prominence to the vernacular. By these means, through imitation, practice, and special exercises, some of them, it must be confessed, still dry and formal, he provided an intensive training calculated to give pupils a real knowledge of Latin. Discipline was equally revised in his scheme, and new studies were added to the Latin curriculum; at least he included physical training.

For other programs see Monroe, Thomas Platter and the Educ. Ren., 63 ff.

These views of reformers and details of special schools and schoolmasters indicate the real contributions to education from the Renaissance movement. Almost every one of the men referred to made religious training an essential, if not the essential, of school work, thus following the traditions of monastic schools which were their intellectual parents. As has been noted, much school time was given

to church service even in the later Renaissance. These traditions, however, were re-created and reformed according to Reformation ideals. The religious nature of education comes out clearly in the case of Luther, Melanchthon, Zwingli, Colet, Trotzendorf, and may justly be assumed in the case of all. The text-books of the days were very religious and supplied religious forms.

APPENDIX II

Classes of Schools.

It is interesting to note the different classes of schools which we find in this period: —[31]

1. Cathedral schools,— still existing in small numbers.
2. "College schools," *i.e.*, grammar schools connected with collegiate churches. (Collegiate churches were similar to cathedral churches, only they were not so closely connected with the Bishop and were not the seat of his government. Grammar schools seem to have been a more essential part of a collegiate church than of a cathedral. There were large numbers of these schools.
3. Monastery schools, or schools for which the monasteries were trustees.— Comparatively few.
4. Grammar schools connected with hospitals (almshouses) as a part of the foundation.— Few.
5. Chantry schools, kept by chantry priests. The history of these church functionaries and their schools would make a very interesting topic. It would perhaps be fair to say that they were religious schools of an elementary grade.
6. Guild schools,— founded by guilds; of grammar school grade.
7. Independent schools, like St. Paul's. In such cases schools were the main object of the foundations. Their object was not joined with any ecclesiastical purpose. There was even no requirement that the teachers should be priests.

1, 2, 3, 4, and 5 may be classed together as ecclesiastical. No. 6 was perhaps similar to city schools and probably had some church relations. No. 7 is a new creation. All but 5 were grammar schools, and for curriculum and method may be considered together.

These are the schools found in England. The list for Germany would be similar, except that we must add a school which was especially typical of that country, the City Latin School, or Gymnasium.

APPENDIX III

Some Old Renaissance Text-Books.

1. Lac Puerorum (Mylk for Chyldren), M. Holti, 1526, first printed in 1497.

[31] See Leach, Eng. Schools at the Reformation, Chapters 1–9.

Frontispiece,— a picture of a school room. Windows high. Panelled ceiling. Throne-like chair with master seated on it, mild and deliberate in attitude, but holding a bristling bunch of rods in his right hand, while his left is in a position of gesture, as though illustrating some of the graphic devices of the book. Children in a circle before him sitting on low benches on a flagstone floor.

Brief abstract of contents.

1. Dedicatory and explanatory verse in Latin.
2. Parts of speech, with remarks.
3. Declension of the article, so-called, *i.e.*, hic. There is a representation of a hand, and a case and its plural are inscribed on each finger, the name of the case following the form. The thumb has two cases, the nominative on the upper part, the ablative on the lower,— to even the declension-forms.
4. Declension of nouns and remarks. Eight classes of nouns,— proper, appellative, substantive, adjective, interrogative, demonstrative, reddityf, and relatyf,— but no examples are given.
5. The a-declension.
6. The us-declension, with hand device.
7. Third, fourth, and fifth declensions follow, not graphically arranged and in solid black letter paragraphs,— not easy to decipher.
8. Declension of adjectives as in 7, but all forms are given.
9. Another graphic hand device, giving a summary of case endings of all declensions.
10. Comparison.
11. Classification and declension of pronouns, primitive and relative.
12. Conjugation,— general facts followed by inflections: — shewynge mode, askynge mode, byddynge mode, wysshynge mode, potencyall mode, subjunctyf mode, infinityf mode.
13. Other parts of speech.
14. Deffinicyon of nownes (including the common classes, proper, appellative, substantive, adjective). "A nowne betokeneth a thing without any difference of tyme."—"The name of all I may see, fele, or perceyve by ony of my fyve wytes is a nowne."
15. Accidents of nouns.
16. Accidents of verbs. His definition of a verb is this, "A verb betokeneth a thynge with some token of tyme." Verbs are divided into substantyve, as sum, existo, maneo; vocatyve, as nomino; adjectyve (including all other verbs which do not come under the first two classes), as amo, lego.
17. Accidents of other parts of speech.
18. The three "concords" and syntax. A curious topic in the concords or syntax is, "the strength of compelynge case (referring to verbs which take the same case after as before).

The book ends with "Thome More Epigramma" and some Latin verses.

In this book the attempt to add interest and life to method and to relieve the old abstractness is very noticeable.

2. A Shorte Introduction of Grammar generally to be used, Compyled and set forth for the bringing up of all those that intende to attayne the knowledge of the Latine tongue.— 1577.

1. Elizabeth's proclamation commanding the use of this text-book for uniformity.

2. A foreword to the reader on the necessity of a good foundation. Reasons for the difficulty of attaining this are given: —"Because that they who professed the arte of teaching grammar did teach divers grammars and not one, and if by chaunce they taught one Grammar, yet they did it diversly, and so could not do it all beste, because there is but one bestnesse, not only in everything, but also in the manner of everything." The writer goes on to say that the first difficulty has been avoided by causing "one kinde of Grammar by sundry learned men to be diligently drawne, and so to be set out onely everywhere to be taught for the use of learners, and for the hurt in chaunging of schoolmaisters." But he frankly acknowledges that diversity of teaching continues and always will, because of human nature. With a fine touch of modesty he adds, "It is not amisse, if one seeing by triall an easier and readyer way than the common sort of teachers doe, would saye what he hath proued." And then he goes on to give the following advice and suggestions: — 1. That the "diligent Payster make not the scholer haste to much." 2. There should be plenty of examples in declensions and conjugations, a matter in which the old grammars were noticeably deficient, so that the scholar may know all words. 3. "This when he can perfectly doe and hath learned every part, not by rote, but by reason, and is cunninger in the understanding of the thing than in the rehearsing of the words,— then let him passe to the Concordes, to know the agreement of the partes among themselves." 4. There should be "playne and sundry examples" and daily practice on "declension of verbs," apparently with sentence framing. 5. "When these concordes be well knowne unto them, an easie and a pleasaunt payne, they are to come to some preatie booke wherin is contayned not only the eloquence of the tongue, but also a good playne lesson of honesty and godlinesse," which reminds one of Quintilian. With this comes retrotranslation and the learning of syntax rules as occasion comes. 6. The "Payster" is to be continually busy with the pupil and is not to construe the principle, "there is no haste," into license to teach a little and then leave the pupil to himself. 7. Use of Latin is advised. 8. The turning of an English book into Latin is more useful than ordinary translation.

3. Analytics of letters.

4. A Latin prayer and the English translation.

5. Analytics of parts of speech with declensions and conjugations

rather skilfully laid out. The subjunctive in regular verbs is called optative; in sum, etc., and in passives, it is called potential and subjunctive.

6. The Concordes,— between verb and noun, substantive and adjective, antecedent and relative. The second concord is rather strikingly stated: —"An adjective, whether it be a noune, pronoune, or participle, agreeeth with his substantive in case, gender, and number." The concept, adjective, had considerably more extension than at present.

7. Constructions of nouns, substantives, adjectives, etc.

All this in black letter and evidently giving the mere essentials of grammar. Then follows, in Latin, Lily's Grammar, probably the Brevissima Institutio.

Brief abstract of the Institutio.

1. Guilielmi Lilii ad suos discipulos monita paedagogica, seu carmen de maribus,— a poem of about eight lines.

2. Symbolum Apostolorum (an elaborate Apostles' creed), and a Praecatio Dominica.

3. The Decalog.

4. Baptismus (Christ's last words to His disciples.)

5. Coena Dominica (introduction to the Lord's supper.)

6. Puer orans ante cibum,— four specimens.

All this shows the close union of church and school. Then follows the grammar proper.

1. Analytics of letters,— more extended and formal than in the English version preceding.

2. Eight parts of speech and their accidence, in great detail, but far less helpful than in the English treatise, or in Cheever's Latin Accidence. It goes too much into abstractions. Under verbs comes the famous Lily's De Simplicium verborum primae conjugationis communi praeterito, "-as in praesenti perfectum format in -avi, etc.

3. The "concords."

4. Construction of nouns, verbs, pronouns, etc., with examples from different authors. Here the Latin part is superior to the English part described above, where examples are scarce.

5. Figures and prosody.

At the end of the book is a poem of twelve lines,—"Magister discipulos ad studia literarum cohortans; also a "Puer orans ante lectionem" (prayer), a "Puer orans ante cibum," a "Puer orans post cibum," and an "oratio matutina."

3. A 1542 illuminated vellum copy of "Lillij Grammatica."

1. Religious exercises, Latin on one side, English opposite.

2. Henry Eighth's proclamation directing the use of the book in which he says, "Emong the manyfolde busines and most weyghty affayres appertayning to our Regall auctoritee and offyce we forgette

not the tendre babes and the youth of our realme whose good education and godly bryngyng up is a greate furniture to the same and cause of moche goodnesse." (For full text of a similar proclamation see the author's article on the Evolution and Present Status of the Beginner's Latin Book, in Jour. of Ped., 16: 191.)

3. A preface in English, "to the reader."
4. An introduction to the eight parts of speech in English.
5. Lily's Carmen de Moribus, the creed in Latin, and other religious compositions.
6. An institutio compendiaria totius grammaticae.
7. Foreword in Latin to teachers and an "ad lectionem" in Latin verse.
8. The accidence, similar to that in the Lily previously described.
9. Syntax and prosody in Latin.

These books are all of small compass. They will serve to show the nature of the new textbooks,—the effort to simplify and explain, and the mixed character of the books (English-Latin, etc.), indicating a transition period. The contrast between these books and the ponderous volumes of grammar abstractions of an earlier period, as described in the Appendix to Chapter XII, is striking. In Milton's "Digest of Accidence and Grammar" he complains that grammar as previously taught consumed ten years of one's life.

XVII

NOTABLE CONTRIBUTIONS OF THE RENAISSANCE TO SECONDARY EDUCATION — A GENERAL SUMMARY

Contrasts in the period.— As has already been indicated the Renaissance was a complex educational period. Its peculiar complexity was due to the fact that it was a transition period. Hence we find striking contrasts side by side. The old scholastic and monastic ideas of course projected themselves into succeeding periods. They were so deeply rooted and had been so wide-spread and popular that they did not easily succumb to newer ideas. But the Revival had brought forward forces and ideas that had more life and weight and agreed far better with modern pedagogical principles. Any period presenting such conditions must show variety and contrasts before settling upon one type to be projected into the new future. Amid this variety what were the real contributions with which we should credit the Renaissance? What was the school-type of this epoch,— curriculum, method, aim?

Old forms still cling, but are waning.— Deeply embedded in the educational polity of the period, as has been suggested, were the theory and practice represented by curricula and methods that the leaders of the new times were lashing and ridiculing. They were so prevalent and so conspicuous for at least part of the period that they might almost seem characteristic. But they were merely inheritances. They held over with schools which came from previous periods. They thus looked to the past and were not at all representative of the times.[1]

New forms,— prophetic.— Again, using the best view-points and looking as far into the future as these looked into the past, we find a school type [1] that represented the underlying life of

[1] According to Luther's estimate the comparative efficiency of the new and old would be well expressed by the ratio 20: 3, or perhaps even 40: 3. Again he says that they can now learn in three years more than formerly in universities and cloisters.

the Renaissance, but had not yet taken hold of the general school public and organized itself into definite forms. This was the type argued by Rabelais and Ratke,[2] Comenius[2] and Luther. The curriculum forming under the influence of this new pedagogy included Latin, Greek, history, geography and other sciences, civics, commercial subjects,[3] and physical training. The method had more of the concrete and more regard for the nature of the child. We shall look for this type to assert itself in some future century. Neither of these two types answers our query.

Da Feltre's school not the type.— If we turn to Da Feltre's school we shall still come short of our quest, for it did not become a type. Sturm's school comes nearer the purpose. It was a conspicuous model in its day. Ascham profited by it in English education. Its influence extended far into the future. It represented the real legacy of the Renaissance, as far as school forms are concerned.

The final Renaissance curriculum and method.— If then we take Sturm's curriculum,— grammar in the narrow sense, literature (more to enforce and cultivate style than for its own sake), rhetoric, logic, and a mere touch of mathematics,— his formal method, in which memory work, imitation, and incessant practice predominated (a revived classical method), and his aim, linguistic training of an intense type, we have a close approximation to the final influence of the Renaissance. And if we remember that many, probably the majority, of the schools still clung to a lower ideal that looked toward the past, we shall realize in a degree the actual state of the schools of the day, and we may, in a very general way, accept Laurie's statement[4] as a kind of summary estimate of Renaissance schools.

[2] These two educators came on the border line between this period and the next. They may, however, be appropriately mentioned here.

[3] Commercial subjects had an interesting experience in England. They were added to the grammar school curriculum, but the court before which school questions frequently came, because of the desire of the old authorities to keep out teachers not of their cloth, or to keep the old curriculum pure, decided in at least one case that the legal curriculum was a classical one. The terms of endowment served as conservative forces.— De Montmorency, *op. cit.*, 182–3.

[4] See Chapter XVI, p. 262.

Memory was still the key to method. Dictation, copying, and repetition were still familiar terms.

An interesting episode at Cambridge.— The precedence and predominance of grammar are well illustrated by a bit of history from the University of Cambridge. The University statutes of 1550 substituted mathematics for grammar as the initial study for youths fresh from school, but the statutes of Elizabeth, fifty years later, returned grammar to its old place. Then elementary rules of arithmetic and definitions, axioms, and a few propositions from Euclid's first book sufficed for mathematics, and the study of geography, history, and astronomy was far behind the times, neglecting the newer development and clinging to things that were ancient.[5] Elizabeth was Ascham's exemplary scholar in the classics. It was quite in keeping with the pseudo-humanism of her training to revert to grammar as the great agent of education. In schools generally, as well as in the universities, grammar and grammar methods probably held their own. The university "arts course" well reflected the Renaissance characteristics of secondary education, for it was really of a secondary nature.

But there were some gains, and some germinal ideas that had already begun to work, of which any summary of the Renaissance must take account. Otherwise we fail to give the period just characterization, and to distinguish it from previous periods. The gains were in many directions:

Gains over previous periods.— 1. A more effective method.— There was a more *efficient method,* giving more life to Latin teaching, which was the principal part of school work. Instruction was also organized with more force and precision, as seen in various schools described in text and appendices.

2. The period gave to the school the *things* that formed the foundation of the curriculum, in place of the *shadow* of *things* found in dry epitomes that contained only the gleanings of past centuries.

3. Again, schools were, in the aggregate, more concerned

[5] In the middle of the 16th century there was complaint as to the state of learning in the Universities where students were mere "pueri." See Mullinger.

with wholes in place of fragments of the classics and with a wider range of reading, than in previous periods. There were, therefore, generally speaking, more substance and less form than there had been since Roman times. Latin authors and, to a slight extent, Greek authors again lived with students and gave of their personality and vitality. This change brought students into contact with a wider range of interests. Eventually Renaissance education sank to a fragmentary treatment of many authors for the sake of form, but it was never characterized by the paucity of interest that appeared in previous epochs.

4. **New text-books in various subjects.**— The Renaissance gave new text-books. Latin authors must be studied through books, and it makes a great deal of difference what form the book takes. Previously, when the book was only in the master's hands, it mattered little what its character was; all depended on the ability and enterprise of the teacher in presenting its contents.[6] Now the printing press made it possible to have books more frequently in the pupil's hands, though such books, as we have already seen, were still scarce. There was a good deal of activity in preparing books for the schools. Sturm and Melanchthon busied themselves in this direction. They edited the classical authors. Melanchthon even made a book on physics.[7] From a general bibliography in the British Museum it appears that books on chemistry, natural philosophy, natural history, geometry, geography, history, etc., some in Latin, some in English, appeared in great numbers before 1700, beginning in the fifteenth century. But as yet only the old subjects were represented generally in the secondary schools.[8] We may illustrate the advance in text-books by reference to the most typical subject in the curriculum,— Latin grammar.

Grammar was the foundation subject in the spontaneous life of the early Renaissance. It was the central subject in the

[6] As a matter of fact, up to the early university period teachers took the easiest way of conveying knowledge to pupils,— dictation, copying, memorizing.

[7] Physics was still a composite subject, including astronomy, metaphysical questions, etc.

[8] The text book industry is again emphasized in another valuable bibliography, "Repertoire de Ouvrages Pedagogiques du XVIe Siècle."

curriculum of the later Renaissance period, in which form gained precedence over substance, and the main stress in school work was placed upon learning the language rather than upon studying to appreciate that of which the language was a vehicle. When form is dominant, formal and abstract methods, with the dry discipline of artificial study and premature logical analysis, usurp the place of developmental discipline. The latter follows natural growth, takes advantage of the natural interests of the pupil, and develops new interests by genetic as opposed to formal principles. Grammar often became such a dry and barren routine of memory work and drill that it actually tyrannized in the school, till, out of the new enthusiasm in education and out of the restiveness caused by outworn methods and material, came a demand for modern grammars,— simplifications of the heavy and technical treatises of the earlier time. Especially, as Latin declined as a spoken language, it became necessary to put more illustrative material into text-books.

New grammars.— It is very interesting to look over some of the grammars and introductory Latin books that were issued at this time and came with increasing frequency in the following centuries. They might almost be called Latin primers, so far as size is concerned, but they are really older grammars abbreviated and simplified and made more interesting. They appealed to young minds, and, as compared with older books, gave a touch of the concrete. The emphatic way in which these authors treated the subject argues the prevalence of other views.[9] According to Hazlitt the first clear approach to our modern grammars was Robertson's edition of Lily, published in 1530. This was all in Latin. Milton made a digest of accidence and grammar, remarking that by the ordinary course of procedure ten years of one's life were consumed by grammar. It should also be noted that a very vigorous movement set in at this time in England to teach Latin through the English, as seen by books of the period presenting the "true method of teaching the Latin tongue by the English."[10]

[9] Occasionally a frontispiece is added. It tells quite as much as to pedagogical customs as the book itself. It represents the teacher as dictating and the pupil copying.

[10] In Germany too some attention was given to the vernacular. Schools made some use of it in teaching Latin.

It will be interesting to look more closely at a few of these old books. Brief descriptions of two or three that the author has had an opportunity to examine have been given in an appendix to Chapter XVI.[11]

5. **Vernacular and commercial subjects.**— The vernacular and commercial studies were pushing into the schools. It has just been shown that English and German were coming to be media of instruction in the classics in their respective countries. The same was probably true of French. But this is not the only way in which the vernacular was claiming its rights in different countries. It was the basis of elementary education now, showing not only that modern languages had developed toward the literary stage, but that popular education of a practical sort was coming to its own. As to commercial subjects, they affected both the elementary and the secondary school. That they should come into elementary education, or that elementary education should become practical and popular, might call for small comment or opposition, but that they should invade the precincts of the old grammar or Latin school, which were preempted for and by older subjects, was a very different matter. The dubious statements of those who feared that the foundation of things educational were to be upset by the intrusion of these plebeian subjects into old established curricula[12] shows not merely conservatism, but the aristocratic and even autocratic nature of educational opinion of the day. It reminds us of more recent outcries. The coming of these modern subjects, however, was one of the most significant signs of the educational times.

6. **Relations of secondary school and higher school.**— The grammar schools, through the improvement of their programs and the vigor of their work, were coming up to the measure of real preparatory schools, and thus were filling the gap that the university felt when it established grammar schools of its own. They even took a part of the university curriculum and thus awakened the jealousy of the superior institution. The university in turn tried to dictate the policy of the lower school. Platter tells us that the university authorities requested

[11] See Appendix 3, last chapter.
[12] See Green, Town Life in the Fifteenth Century, II: 12 ff.

him to get their sanction before offering his reading courses.[13] The times were ripening for the separation of secondary and higher education in some of their relations.

7. **Great activity in establishing secondary schools.**— The Renaissance was distinguished by the rapid increase of secondary schools. Here we touch one of its most important characteristics. We should expect just such results from the progressive spirit of the period. Three influences were now pushing education on, the Church, the State,[14] and the Reformers. From the middle of the sixteenth century, in England, the State took a decided hand in promoting education, and its influence elsewhere began as early as this. The indications are that all children were assumed to be taught in grammar schools or by private tutors.[15] There was a period preceding the Reformation when education was more flourishing than at a much later date. Leach assures us that at the Reformation there were more grammar schools in England, in proportion to the population, than in the middle of the nineteenth century, and that a very large proportion of the population,— larger than at the end of the nineteenth century,— had access to the schools.[16] Hazlitt affirms that more grammar schools were established within thirty years of the Reformation than in three hundred years before.[17] Again Nohle speaks of the spread of schools through all the towns of Germany.[18] There was thus a widespread movement confined to no section and to no nation.

[13] See Platter's account of his school experiences, Amer. Jour. of Education 5: 79 ff.; 24: 101; also Monroe's Thomas Platter, etc.

[14] Towns established schools at a much earlier date.

[15] This brought educational competition. It was probably found in every town of importance. Great effort was made on the part of the older grammar schools to maintain a monopoly of education. This was probably largely due to religious motives, as seen by statutes and ordinances. It was an effort to keep dissenters from intruding. The old grammar schools were a part of the organization of the old established church. But we are bound to suppose that financial motives also had an influence. School teaching was not only a profession, but a financial venture.

[16] Leach, *op. cit.*

[17] Hazlitt, *op. cit.*

[18] See Report of U. S. Com. of Educ., 1877-8, I: 22 (Nohle, History of the German School System).

This progress of secondary schools should be associated with the Reniassance because it was a natural outcome of the Reniassance spirit.

The earnestness of our early colonists in providing secondary educational facilities was a reflex of educational enterprise in the old world. They were used to educational advantages there; they must have them here.

Who attended schools.— We do not see the full significance of these facts as to educational opportunities unless we note the constituency of the schools. De Montmorency, who has gone into a portion of the evolution of English education in great detail,[19] claims that in England the schools' chief patrons, before 1406, were of the free non-gentle class. He asserts that they were attended by the children of the burgage tenants in towns, by the children of freeholders, and copyholders, and, in many cases, by the children of people of the lower class.[20] The policy and character of the lord and his spiritual advisers in a lay fee, not the financial ability of the people, determined school-going. It would seem that the nobles were less inclined to schools than were others. They had other interests. Schooling was beneath them. War and knightly arts were for them. All this is in sharp contrast with conditions somewhat later, when secondary schools gained among the higher born and lost among the people, so that in England the grammar schools were almost preempted by the higher and higher middle classes. This was due of course to the shifting of economic and political conditions, which, now that the days of chivalry were over, turned the thoughts of the gentle from warlike to civil pursuits.

This wide-spread ministry of secondary education is exactly

[19] See his State Intervention in Eng. Educ., 25 ff.

[20] This is one of the most striking and interesting characteristics of the period. The evidence is so strong that it cannot be doubted. Its implications, however, may not extend as far as would appear at first sight. Secondary schools of Europe generally have not been so clearly differentiated as our high schools. The grammar school was an elementary school and secondary school combined, receiving a boy at about nine, or even at a lower age, giving him some preliminary schooling, and then introducing him to genuine secondary school work. How far the average pupil went in the grammar school, whether beyond the elementary section, it is evidently impossible to tell, as it was not an age of statistics. But even tho attendance at the secondary part of secondary schools may not have been as great as the statements might seem to imply, the growth of schools and the extent of school attendance would be hardly less remarkable.

in accord with the informing and buoyant spirit of the times, and makes the Renaissance period still more conspicuous and more strikingly prophetic.

New sponsors.— It is especially interesting, in connection with this multiplication of schools, to note the new agencies at work. Schools were no longer the offspring merely of the Church. Other forces, political and commercial, had brought new patrons and sponsors.[21] Certainly the enterprise in founding schools in England owed much to industrial ambition. The very names of the schools are witnesses to this.[22] Similar forces were at work elsewhere, as is evident from what has been said in previous chapters.[23]

8. **Service of the Renaissance to independent thinking and investigation.**— The Renaissance was a vestibule to a period of individual thought and investigation. It prepared the way by awakening and stimulating fresh thought. It also itself furnished examples of independent thought and was characterized by vigorous investigation into things of the past and by the development of the new science of philology. It was, however, too much absorbed in a study of the past to warrant any considerable claim to independence and an investigative spirit. It rested on authority, but took a new attitude toward it; it was content only with primary, not with secondary, authority. It was thus an essential agent in the development of new mental activity and the establishment of new mental attitudes, and it made some notable beginnings in these directions.

All these things affected the secondary school, but they affected its spirit more than its form. As already indicated, the curriculum was the same as before in name, but not in sub-

[21] It is interesting to note what seem to be the leading motives in the spread of schools. Hazlitt says that, not only in this epoch, but to the present time, the force that has promoted education has come from either political or commercial motives.

[22] Note Merchant Tailors' School and many others.

[23] While considering these estimates of the extent of education we must also remember that Luther complained that the great mass of youth were wholly destitute of education. He may, however, have been speaking of earlier days before the new movement, in which he himself was a leading spirit, was fairly under way. Again pupils might go to school without getting much, if we are to credit some accounts.

stance, and often not in method. There was a new enthusiasm in the old studies, and they were more humanely and pedagogically applied to education,— at least in certain cases; the trend was that way. A feeling was therefore growing for some sides of secondary school life neglected before. But in spite of wholesome modifications education was still very bare and formal. The intellectual life of the adolescent was to a considerable extent as obscure as ever. The secondary curriculum came to be associated as a matter of course with the limited interests that the Renaissance magnified.[24] The Renaissance leaders and their successors so rung the changes here, so naïvely assumed and so persuasively persuaded men that they had the true fundamentals of education, that belief in it became an instinct. Pupils of one generation became the teachers of the next and handed the tradition on.

The school form which became stereotyped may be outlined as follows:

I. Aim.— Humanistic, 1, in the true sense of the word; 2, later, in the more formal sense,— to make the pupil master of a pure classical style. But character as an aim in education was coming to notice.[25] As shown on page 274, the later interpretation of the aim represented the final influence of the Renaissance.

II. Curriculum.— 1. Latin (occasionally Greek). Wider reading, though still limited. A strong set toward the formal discipline idea and toward grammar and rhetoric as the ideal subjects. Rhetoric was merely a part of Latin. 2. Logic. 3. Elementary work in number.

III. Method: — Intense discipline of "memory," and practice to command style (relieved by elements of the natural method inevitable at a time when Latin was the language of the school-room). We find a strong set toward "formal disci-

[24] At a little later date Pestalozzi's intuition rightly estimated the curriculum when he said, "We imagined in our boyish days that we could prepare ourselves by the superficial school knowledge of the life of Greek and Roman citizens for the restrictel life of citizens in a Swiss Canton."

[25] See Report of U. S. Com. of Educ., 1899, pp. 47-8; Elyot's Governour; Laurie, *op. cit.*, 38–42; also the outline of Da Feltre's school in Chap. XV.

pline." Sternness, strictness, stiffness were prevailing characteristics of general management, though emphasis was laid on the opposite characteristics in certain cases. Opinions as to discipline were re-forming.

The rank and file of schoolmasters were probably mere givers of tasks and hearers of lessons,— men of narrow attainments.

Sturm was the master moulder of this school form. The main elements of his system, Latin and Latin method, were prominent, not to say predominant in succeeding school programs for several centuries.[26] The chief changes made in his system in following centuries seem to have been, that the worship of disciplinary Latin teaching was substituted for the worship of the stylistic, and that the study of mathematics was added as a disciplinary agency. Down to our time men have worshipped the great schoolmaster of the sixteenth century rather more than the far greater master of the first. They have thus emphasized form rather than content.[27] Till within the last fifty years secondary education has been limited in large measure to a superficial knowledge of ancient civilization (for that is all the average student gained), a small grasp of its language, an elementary study of mathematics, and a still slighter study, if it should be called study, of modern literature and history.

Persistence of Renaissance ideals.— Such results follow from a rather passive acceptance of the influence, and acquiescence in the ideas, of Sturm and the Sturmians. The Renaissance and a few succeeding years did the thinking for secondary education, so that the schools, till very recent times, have lived largely on inheritances. That people as a rule do comparatively little thinking and get most of their judgments ready-made, as Titchener claims, would seem to find support here. It has been hard therefore to modify views as to the proper studies, and particularly the proper kind of study, for adolescents. What was in exact accord with conditions,

[26] See an article on the Evolution of Latin Method in the Journal of Ped., 16: 191.

[27] There have been spasmodic revivals of the humanistic spirit, but the conclusion here stated seems to represent best the settled policy of the schools.

political, social, and intellectual, at first, has been growing farther and farther away from them, so far as matter is concerned. Method did not even then accord with intellectual demands, because it lacked one of the essential elements of method. Later it did not accord even with political and social demands.

To be more specific, autocratic conditions favor authority in education,—the learning of authoritative forms and formulæ, the mastery (sometimes only verbal) of others' thinking in place of independent thinking, the following of traditional lines in place of initiative, the static in place of the dynamic. Rising democracy required the second alternatives rather than the first, and it has suffered in genuine development because matter and methods that accorded with social conditions of the late Middle Ages and the beginnings of modern centuries were projected into centuries that required something more accordant with their spirit. The times changed, but curriculum and method, which should respond rather readily to new views and policies, were fixed in hard and fast lines and were essentially unresponsive. The oxygen of better pedagogy from time to time gave an appearance of life, but there followed relapses into the coldness and dullness of the formal again. The momentum gained from this long assurance kept the secondary school narrow for ages. The Renaissance was in an important sense the source of this momentum. When all is said we must remember that it transmitted to America ideals that gave pupils, after seven or eight years in the grammar school, Latin, a little English, and no arithmetic. It is here that American secondary education begins.

XVIII

SEVENTEENTH–EIGHTEENTH CENTURY MOVEMENTS IN SECONDARY EDUCATION

What the Renaissance fixed in secondary school schemes. — From what has been said it is evident that the Renaissance formulated a very definite curriculum and method. These were so circumscribed and the field covered was so small that the general plan could be kept well in hand. Men knew just where they were and were never at loss to choose their course. The subjects we have noted were fixed strongly in the secondary school,— so strongly that nothing could shake them. Method, too, established itself. As indicated in the last chapter, however, one change was to come when Latin ceased to be the language of school and class-room. We have seen that even in the Renaissance a movement to use the vernacular was initiated. When the change came, the beginner's Latin book with its exercises, Latin-vernacular and vernacular-Latin, was on the way. The way led through simplified grammars,[1] supplementary reading books, and groups of exercises that were an amelioration of the older grammar work, but still a severe tax on the memory and youthful spirit often incommensurate with the advantages gained. Occasionally a man of larger views and finer feelings for educational values tried to reform Latin teaching, but this was a minor episode, not a typical one.[2]

The classical method.— Method finally issued in a long series of exercises, bare and formal, to give mastery of Latin vocabulary, forms, and syntax, while Latin authors came to be used as means of grammatical drill quite as much as for any

[1] We found that the more progressive and vigorous educational spirit of the Renaissance began this evolution by simplifying grammars and adding more interest and spontaneity to the beginner's work.

[2] See an article in the Journal of Pedagogy, 16: 191 ff., giving the evolution of Latin method and the Beginner's Latin Book.

culture value. Less was read in four years than should be read in a single year with any worthy method or ideal. This was the classical method. It has been modified and relieved of some of its crudeness, and attempts have been made at reform, but it remains to-day as the foundation and more than the foundation of Latin method. Its main outlines appear in the Renaissance and more clearly in the near years afterwards. We begin the period following the Renaissance then with a clearly cut curriculum and method well anchored in the schools.

But men are never satisfied with steadfast gaze in any one direction nor with the acceptance of ancient authority, which were in effect the general characteristics of the Renaissance. However inviting the prospect, as the evolution proceeds men finally grow restless. They need new scenes or new occupations, and they need new thought; — in this case they thought nearer home.

A new curriculum and method.— Ever since the Saracens stirred the intellect of Europe, and the rising university movement sharpened wits, and the Renaissance opened a new (albeit an old) world, a new curriculum and method could be seen in shadowy outlines. The movements just referred to had disclosed wonderful achievements of the past that took hold of men's imaginations and stirred to great things. They had set men thinking and working enthusiastically in fresh ways, though along paths trodden before. They had therefore been a stimulus to new ways and means in education. With this momentum, to be increased by new forces that were soon to appear, the new curriculum and the new method were bound to come and claim the right to a place in the schools.

The quest of the real.— As noted in the last chapters a Renaissance logically issues in a return to realities,— realities of all sorts. We found, however, that the Renaissance we have studied betook itself most naturally to realities in a limited field; these were in fact the only realities that existed. The Renaissance itself gave little, and crystallized and systematized less, that was new and seemingly worth serious study. But other realities were to appear and were to invite acquaintance and investigation. There was to be nothing partial and limited. It is well to note, however, that vigorous thinking in

narrow lines makes larger thinking possible. The Renaissance, by re-thinking great thoughts, and by re-following great processes with new vigor and enthusiasm, was stimulating the intellect for new conquests, if opportunity offered. There were influences at work that would make the opportunity.

Signs of new times.— After the ancient turmoil the world rested from intense attention to its causes and effects, and directed its attention to other things. A new phase of development resulted. Discoveries, inventions, travels, the opening up of new trade-routes, the growth and broadening of industrial life, commercial competition, the spread of ideas of culture, the growth in standards of living creating new demands to be supplied — all this caused the re-grouping and specialization of experiences. Each new and specialized body of experiences crystallized modes of procedure, formulæ, laws, principles that must be possessed in a vital way by the newer generation, if the occupation or interest in question was to hold its own. At the same time, as individual responsibility and initiative were developing, individuals within the new industrial or professional or cultural groups must become experts to win their way by competition. General training and the old agency of apprenticeship would not long be sufficient. A culture idea and the idea of special training for special purposes must attach themselves to these new interests. Particularly the need of technical training, as a basis for success in the new technical pursuits, began to be keenly felt. It is easy to see, when all the circumstances are taken into account, that the key to the new ideas was *mastery of environment.*

The way to individual initiative.— The natural order of evolution in such matters is this: — First comes the *tribal idea,* under various forms and modifications, by which the community gives the boy the exact knowledge developed by experience, either through group teaching and rote-method, or (later) through apprenticeship (which is only the tribal idea modified). 2. Then appears the *individual idea,* which is calculated to make possible larger advance, because a group of more or less independent individuals, each having power of initiative, tries more paths to progress than are open to mass movements. This training has several stages from more or

less empirical work to that which gives insight into the inner meaning of processes, a comprehensive knowledge of scientific principles and laws, and power to formulate hypotheses and theories. We have now, through various lines of development, reached securely the edge of the latter form of education.[3] Even the Romans had much of the tribal idea in their education, and they stood like a wall between Greece and Western Europe,— between the best of the ancient world and the ideals of the modern world.

New studies and books.— There is no better indication of the new order of things than the fact that geography and history were becoming sciences, that groups of nature-facts were crystallizing into sciences, and that exact science was growing and coming nearer adolescent comprehension. Facts must first be classified, before they become objects of thought and study in school. A select body of men had been engaged in isolated studies in these great subjects — in gathering and classifying facts. But such things are not for the few, except in the initial stages of development. From sentiment and from practical notions, as well as from a desire to preserve and promote acquisition, sciences, of whatever kind, naturally become simplified so that young minds may be inducted into the elements of great subjects. Thus text-books on new grammar and rhetoric and on physics, algebra, and history were being written.[4] Other books were to follow.

Leaders.— Aside from these book-makers and students of great subjects there were, scattered through the years, leaders of another kind, who touched education in a general or special way, and who proposed, and to some extent put into practical use, new school programs and methods. They were men whose minds were in close touch with the times, rather than absorbed by admiration of the past. We have already noticed Rabelais, Ratke, Comenius, and Montaigne. Others continued

[3] This was begun by the Sophists in Greece in a limited way, but was interrupted.

It is but fair to say, however, that new ideals and forms needed to be settled before the idea started by the Sophists could be safely carried out.

[4] See Chapter XVII and Appendix to Chapter XVI, and compare with the epitome-text-books of Chapter XII.

their vigorous and virile thinking. Bacon, Descartes, Milton, Locke, Leibnitz and Fénelon, to mention only a few of the great company, were opening up new subjects, or new modes of approaching subjects, and were suggesting new curricula, while "teaching congregations" of the reform type, through the solidarity of organization, were spreading new ideas in a practical way. These leaders in educational thought were confined to no country, so that new things in education were making themselves felt everywhere. The city school, which had taken root particularly on the Continent, offered special opportunity for progress and organization in the new lines. In England more depended on public sentiment as expressed through private enterprise.

A new curriculum.— Thus through various agencies came results of a very practical nature. For example, Leibnitz proposed a curriculum in which logic, mathematics, physics, geography, and language were the most important studies; but, what is more significant, he argued that the place of any study in the curriculum depended upon relations to society and must be regulated by needs judged from this view-point. At about the same time Milton was formulating this curriculum:— religious instruction, classics, mathematics, geography, natural philosophy, architecture, engineering, navigation, anatomy, and medicine,— all to be completed by the time the boy was sixteen years old. The academies of the Dissenters were also putting new and independent curricula into operation. So far as secondary studies are concerned, we might summarize the views of these men and bodies of men, and of others of the period, in some such curriculum as this: natural science, physics, mathematics, history, and the vernacular, in addition to the old trio.

The Ritteracademie.— But there was still another force to be reckoned with. Under French genius, chivalry, which had been a concrete and therefore taking way of expressing old Teutonic virtues combined with Christian graces, had, under current influences, flowered in a new school, or, at any rate, in new school ideas. The "seven knightly arts" took precedence of the older seven arts, thus giving prominence to the physical side of education. The old Latin curriculum was still tolerated, but in the background, while in front, com-

manding the chief attention, were mathematics and physics with their applications, modern languages, geography, the new political science, political history, jurisprudence, statistics, heraldry, and genealogy. Such a curriculum was calculated to awaken greater enthusiasm and spontaneity than the old one. Just before and after the Thirty Years' War French influence was strong with the nobility of Germany, and the new school ideas followed this influence and so had wider application. Here we have the so-called Ritteracademie.

Slow progress.— All these influences had a cumulative effect and gave rise to the movement that we call the "Enlightenment." With the innovations in method emphasized by Bacon, who brought men's attention anew and more fully to objective, observational, and experimental work, and with the innovations in curriculum inspired from so many sources, a new school form must come. A new education was growing. "For a hundred years it grew beside its wise mother," like Hesiod's typical youth of the Silver Age. No doubt it would have had a shorter infancy, had not a new turmoil broken out. Schools have always been at the mercy of politics. The new turmoil was primarily religious, but practically political.[5] It so far reduced Central Europe, the most promising field for educational advance at this time, that a substantial portion of it reverted almost to its natural state, so great was the destruction in all lines and so nearly did the human element come to extinction. Education could not flourish at such a time.[6] But the advance in educational opinion was not changed in direction, however much it may have been retarded in speed. Remarkable as it may seem, when we consider the deplorable condition of Germany, even there men found time to introduce some progressive features into school polity.

The new secondary school and its founders.— The hundred years finally brought the full crystallization of the new ideas in the new school. At this time Francke (1663–1727), gathering up the best in education and inspired by the true teacher-

[5] The Thirty Years' War, (1618–1648).

[6] Little more than a third of the population of Germany survived. Cities were destroyed; property was ruined; the foundations of industry were uprooted.

spirit, founded a school whose curriculum gave effective recognition to mathematics, history, geography, and science. It was Francke who really inspired this new school form that was calculated for the people and better suited to their needs than older forms. It was Semler and Hecker who gave it a fixed position with an appropriate name. Thus came the Reálschule, toward the middle of the eighteenth century. It offered as its curriculum religion, ethics, German, French, Latin, history, geography, arithmetic, elementary geometry, mechanics, architecture, writing, and drawing. It was not only the curriculum that was modern; the method advocated by the school was equally modern. Here objective and inductive work again found a home. This school was the first educational mile-stone since the Renaissance. The studies that it emphasized came into the curriculum to stay. Within a hundred years (which is a short time educationally, at this point in the evolution of secondary schools), they were given a small place in strictly classical schools. Thus modern languages, history, geography, science, drawing, and, especially, mathematics, the third great "disciplinary" subject, secured a slender foothold in secondary education generally.[7]

Growth of the new school idea in different countries.— The influence of the movement is perhaps seen better in Germany than elsewhere. Educational plans took form there early and became more definitely organized there than elsewhere, as has already been indicated. But such influences are a part of world movements and suffer no limits. That the new ideas as to curriculum and method were felt in France is evident from what has already been said. An examination of the growing curricula of the Lycées shows that the new studies were making a place for themselves. Even in England eighteenth century schools (which are held up to ridicule otherwise), showed similar changes. They might be aping popular policies elsewhere, but they at least indicated how generally the new education was attracting attention. Here is an interesting bit of advertising which will show more concretely how things were going in England: —

[7] There was still strong religious influence in the schools. De Montmorency, 182–3.

"At Knaton, near Thirsk in Yorkshire, by the Rev. Mr. Addison and proper assistants, young gentlemen are properly boarded, decently clothed, and regularly instructed in the English, Latin and Greek languages, writing in all hands, arithmetic and geometry with their uses in all kinds of measuring, trigonometry, plane and spherical, applied to navigation, astronomy, etc., algebra and book-keeping after the Italian method. They are furnished with books, paper and other necessaries at 10£ per annum" (*i.e.*, the total cost of board, instruction, etc., came to this amount, as indicated by various other advertisements).[8]

From a different source we get other interesting evidence of the change that had come over education, evidence that serves well here and will be useful a little further on: — "So few boys were then in my station," says Southey, looking back at his boyhood, "and indeed in the station of life just above mine, who received a classical education in those days (1750), compared with what is the case now" (1823).[9] In our own country the early academy programs show how the reforms were coming into education here.

All of this evidence goes to show that the new forces were working thoroughly and that the resulting movement had characteristics of universality and permanence.

[8] Public Advertiser, 1755, quoted by Sydney in his England in the Eighteenth Century, II, 89.

[9] Quoted by De Montmorency.

XIX

SECONDARY EDUCATION IN THE NINETEENTH CENTURY — GENERAL HISTORY

Delay for a second hundred years — A rival movement.— Considering the impetus the new ideas had received and the enthusiasm with which they were carried out, one is hardly prepared to find that they represented prophecies rather than any extended application at the time. The movement had small development for a second hundred years; the age produced another movement that kept it in abeyance. This rival movement was at the bottom political, or rather social and political. The period of conflict already mentioned, which exhausted men's resources and energy and reduced the "people" so much in numbers, was naturally followed by a period of absolutism, good for some purposes doubtless, but bad for general training in new ideas and enterprises. Then came just as natural a reaction, the rise of new democratic sentiments and the creation of new democratic forms, sometimes by revolt and revolution, sometimes more peacefully. The individual again became dominant. A new inspiration roused the best in him and made him ambitious for the best. He had a natural right to the fullest and freest development attainable. The "perfection of the individual" became the ideal. Where should he find models for this development, models of the highest culture yet reached? Or better, how should he reach the best culture? He was helped toward an answer by another circumstance. A thrill of national sentiment passed through Western Europe, particularly through Germany. This spirit of nationality directed and dictated national culture, which now became an intense object of thought. Where should models be found for this rising spirit to work upon and work through? How should culture be attained?

Different answers might have been given to these questions that the new sentiments were suggesting. The leaders took the most obvious one, the easiest one, the one nearest at hand. It was a natural answer. Perhaps it was the best one under the circumstances, though one is permitted to entertain grave doubts here. They said, in effect, the models of highest excellence are in the past. So far right and good. They said also that the surest way of reaching their end lay in the study of past civilization, in winning its culture, and, through its inspiration, making a culture of their own. So far also good. The doubt comes as to the way in which this was carried out and particularly as to the narrow way in which it was applied to the schools.

Thus then the two impulses, individual and national, met in a new enthusiasm for classical study, and especially in the study of what they believed were the classics par excellence, the works of the Greeks. It was, however, Greek thinking and feeling that they wanted to master, not merely language and style, as in the case of Renaissance Latin.

The New Humanism.— So has been explained the rise of the New Humanism, as the movement that we have been following has been significantly named. Undoubtedly the influences referred to played a part, perhaps a large part, in the phenomenon, but we must look further and deeper for other influences, if we are to have an adequate explanation. In fact, it is by no means certain that we have thus far found more than the secondary causes. To make the point clear, we must revert to the last period. The Renaissance brought Greek again into prominence. From its long occultation it naturally made headway slowly. It became a university interest only to a limited extent. It probably had a larger place in the secondary school, but did not come within range of Latin. So small was its development, at the time, that we hardly name it in the typical curriculum handed on by the Renaissance. But decade by decade men learned more of Greek and went deeper into its meaning and spirit. Its constituency widened. Greek was in a very fair way to make itself a universal enthusiasm. Greek would surely have occupied a prominent place in the curriculum through this natural growth from the Renaissance

alone. The double ideal of the New Humanism merely gave color and direction to the new study.

Greek becomes a prominent study of the curriculum.— The Renaissance fixed Latin in the modern curriculum. Greek now became a fixture; it was the new and entrancing subject, in fact it was *the study* of the secondary school. This does not mean that more time was given to Greek than to Latin. Latin had monopolized so much attention in the Renaissance period and before that this would hardly be possible. When the new curriculum took on a settled form we find Greek prominent quantitatively, but not first. The Prussian curriculum of 1859, which may fairly represent the culmination, i. e., the real strength, of the movement, gives the ratio between Greek and Latin as 1:2.[1] Latin was the substantial, practical, disciplinary subject. Soon after the enthusiasm for Greek began a movement was on foot to maintain the prestige of Latin. Greek brought in the ideal, the esthetic, and it was always treated more humanistically than Latin. Thus it brought some influences much needed in any national culture. Latin however had nearly 2,000 years the start of Greek in the direct secondary tradition. We shall see how this difference and the qualitative differences between the two languages affected the curriculum in later years. The immediate effect of the classical revival is seen by such facts as have already been noted and particularly by the following points, readily gathered from a study of several curricula of the period:

Illustrations of the dominant program of studies.— 1. In an 1816 curriculum in Germany the classics occupied more than half the time, Latin, Greek and mathematics $\frac{7}{11}$ of the time, while geography and history were given a beggarly $\frac{1}{11}$, and science still less.

2. In an 1830 school plan the classics occupied $\frac{4}{5}$ of the time, and Latin, Greek and mathematics all of it in a way, as logic, philosophy, the vernacular, and history were taught incidentally in connection with other subjects. This was in Southern Germany, where the classical influence was strongest.

3. A North Germany 1837 curriculum gave more than half

[1] In 1816 one curriculum, however, gives the ratio as 7:8, which may be taken as the limit before things settled.

the time to Latin and Greek, about $\frac{4}{7}$ to Latin, Greek and mathematics, $\frac{1}{8}$ to German and French, $\frac{1}{12}$ to history and geography, $\frac{1}{17}$ to science, and $\frac{1}{30}$ to drawing.

4. An 1859 curriculum in Prussia gave $\frac{1}{2}$ the time to Latin and Greek, about $\frac{5}{8}$ to Latin, Greek and mathematics, about $\frac{1}{10}$ to history and geography, $\frac{1}{20}$ to science, and $\frac{1}{44}$ to drawing.

Germany, as elsewhere stated, is a good type-country for studying these modern movements in secondary education. Till the last decade or two she has been the object of much study and imitation in educational matters. The German idea, therefore, may perhaps be taken to express the general opinion as to the ideal of the period, that intense occupation with Greco-Roman literature and familiarity with the philosophy of classical antiquity gives the best general preparation for every higher profession.

But the movement we are tracing appeared elsewhere. The return to old favorites in the curriculum, and their reinforcement by the addition of Greek, was not a narrow but a widespread policy. It was not a simple return, but a return with new feelings and ideas. In France the effects are seen in the "arts course" of the latter part of the eighteenth century, which was saturated with classics and gave only perfunctory attention to other matters. It is seen also in the statute of 1809 that restored the classics to their old position, making them the center of the curriculum, where the Revolution had established science. The curriculum of the Lyceum of a little later date also shows a preponderance of classics. Southey's statement [2] as to the popularity of the classics in this period, compared with their position about 1750, is significant for England. Our early high school (barring the Boston English High School, which had a genuine classical school by its side), came into this classical inheritance.

We surely find here a classical revival. The day of reál subjects had not yet come.

New demands for new studies — National ambitions and ideals.— But a new movement was already under way, or rather an old movement was taking on new life and making

[2] See page 292, Chapter XVIII.

itself felt in a new and stronger way, backed by stronger influences and arguments. International competition was now becoming keen in a new way. Nations were eager for higher industrial development that commanded the resources of the world. The old idea of conquest, which utilized the best resources of the nation and gave an outlet for all surplus activity and more, had passed. The age of incursions and the unsettling of populations had also passed. The era of conflicts, rising from international and religious jealousies or from factional spirit within the nation itself, was fast passing. The time had come for more intensive internal development. This now naturally occupied attention, and for three reasons: 1. Activities must be utilized. As the demands of the old national occupations had decreased, new outlets for the released energy must be found. 2. The only sure means of progress was the development of native resources. 3. Times of peace accelerated the growth of population, and advancing ideals of life brought a greater number and greater complexity of needs that must be met. All this required industrial development of a higher sort at home. This was naturally supplemented by the idea of industrial development abroad in "spheres of influence," protected by international agreement rather than arms. This would insure industrial outlets and facilitate trade. National progress and commercial progress were becoming identified. The schools then must provide new training calculated to make graduates capable of understanding, utilizing, and increasing the resources of their country. National thought, urged by these considerations, but primarily and more deeply by larger feelings, growing consciously and unconsciously out of the philosophy of education, was throwing a new doubt over ancient school programs. Not only did mastery of environment seem more than ever to be the key to national development, but mastery of oneself, leading to a fuller development of power, seemed to be the key to educational theory.

After nursing at the breast of ancient culture for a long infancy, nations were thus becoming conscious of their personality, and at first impulsive, and then more and more coordinated, movements were made to develop this personality

in ways best suited to its rising needs. National aims and purposes were adding their weight to other influences that have been noted before.

But particularly was the readjustment forced and guided by growth in industrial technique and industrial ideals and standards. National aims turned in this direction. The older centuries had made as much as they could of industry with the simple industrial training of the times. But now investigation resulting in discoveries and inventions was opening up new industrial opportunities on every hand, and industrial processes were becoming more complex and technical. Industry was becoming scientific. It could not long thrive on empirical methods depending upon apprenticeship and some happy knack of doing things. It required scientific and technical education through various curricula adapted to different ends by which leaders might be developed and the rank and file of workers made efficient and effective followers and supporters. Thus it touched what is, after all, the real and final motive force, the individual. When a method, process, or movement appeals to individual power and initiative, it brings to the group, whether smaller or larger,— family, community, school, corporation, or state,— the surest means of progress. But to do this the individual must be socialized. This imposed a new duty of the new times and gave a weighty task to the school, which, under the pressure from other sources, it long left unaccomplished. That the new times made an intensive appeal to the individual is evident. They hardly left him an option. He must respond or fall out of the race.

But the individual met the emergency; he did not have to be forced. Faith in the value and power of education grew. It showed wonderful vitality, especially in democratic countries. More and more to the end of the nineteenth century, and particularly in the opening years of the twentieth century, the idea that every worthy occupation requires special education was growing, and the evolution of new forms of education superior to the old was making headway, till the new curricula took rank in disciplinary and culture value with the old. The old classical curriculum, instead of preempting the field of education, became one of many parallel curricula by

which men were lifting themselves from mediocrity to superiority.

But by this quick look ahead we have outrun the process and treated in a rather summary way the significant changes that were going on. In reality results came very slowly. The science of pedagogy, taking on new life from the new mental activity of the times and stimulated by the conditions that have been described, worked long at the enterprise. Pedagogy is really only an educational interpretation of the forces at work in a community. Its function is to study education in relation to the varied needs and interests of different social units, to formulate principles for guidance, and to suggest forms for the embodiment of principles. From the point of view then of this old-new science we are to follow a little more deliberately the changes that have been referred to.

New spirit of pedagogy.— The new spirit of pedagogy stimulated men to a new study of old things and a study of new things, to the better application of old subjects for school purposes and community progress and to the formation and application of new studies. It must, to be logical, turn its attention to the examination of the various studies in their different relations and to a comparative estimate of their real substance and worth. In other words, pedagogy had to add to the study of "studies" as entities and practicalities, the study of them as embodiments of educational material related to educational ends. Subjects of the curriculum were thus subjected to a new appraisal, and a new system of values was worked out. Hence various emphases were brought to the front according to the points of view of students of educational problems. This served a double purpose. In the first place it led to practical agreement as to the intrinsic value of new studies from more than one point of view. Difference of opinion related mainly to comparative estimates of different subjects and the direction in which they were supposed to affect pupils. In the second place, because equally strong arguments might be made for each view, agreements and differences alike suggested that each subject is the educational equivalent of every other. As a result the most substantial pedagogy of to-day, looking into each study with an honest purpose to see its merits, finds

first that it is part of a unity, not a separate entity; second, that its value depends on the method of its application in the schoolroom. A true psychological method that brings out properly the correlations of subjects will make them all of equal value,— not of the same value, but of equal value. The vain wrangle over comparative merits should lose itself in a new rivalry in which each teacher will give an equal place of honor to all and at the same time strive to make the best of his own.

A reconciliation of cultural and practical.— This new pedagogy, partly caused, partly causing, has been revolutionizing ideas as to curriculum and method. Logically carried out it reconciles the cultural and practical,— shows how that is most truly practical which is most truly cultural, that the practical is cultural, if rightly treated in education, that real culture consists in so mastering the spirit and meaning of human interests and comprehending their relations that one can apply himself and them most efficiently in business, profession, or state. Culture does not lie in the object or study, but in the manner of dealing with it. The epoch we are considering began a movement for culturizing all studies and all professions,[3] even those that we have regarded as merely practical. In a way this sums up all movements. It is the result of reflection on education in a new way, the result of making a study of education itself.

The growth of a new curriculum and of new educational apparatus.— This study made it evident that only a new or remodeled curriculum would satisfy all the demands, demands of theory and practice, of industry and science, of individual and nation, of mental needs and physical needs. Development of the curriculum must be in the direction of mastery of nature and mastery of self. The means for this development were forming in this period. They represented another force working for the consummation of the new ideas, and itself the embodiment of these ideas. The process described in earlier

[3] At first a study or profession is crude, empirical, a bare aggregation of facts, half-facts, and assumptions. As it grows it gets more exact, becomes conscious of ties and relationships, develops the social spirit, attains a dignity that history gives, assumes a fineness of sentiment,— in a word becomes humanized and culturized.

pages of the last chapter,— the modification of old studies and the development of new studies,— was advancing. The great subjects of science, mathematics, sociology, history, were growing. New facts in old and new subjects were accumulating and becoming better and better organized and related. They were also becoming more finely adapted to educational ends, both for information and training. This was accomplished through simplifications and grading, and especially through text-books that were intended to facilitate the application of this alluring body of science to students of different ages. Latin had long had its apparatus for applying itself to schools and this was growing better and better with each generation. Other subjects, both science and art, history and mathematics, were discovering, inventing, and adapting apparatus calculated to make them better and more acceptable agents in school programs.

The Newer Humanism.— A *newer humanism* thus came to view and brought with it new "humanities" in which the vernacular became the central force in the school, the great medium of culture and "discipline." With it went physical training, which became fundamental, history and geography, science and its applications, mathematics and their applications, manual training in a broad sense, and foreign languages, among which modern languages were growing and ancient languages declining. This represented the type curriculum, though it was not all actualized at the time in exact proportions, a result that has not yet been accomplished.

Illustrations in various countries.— The movement was illustrated by the final establishment, systematization, and extension of the reál programs in Germany, which emphasized the new studies and made them the center of the curriculum; by the curricula of the old gymnasia (city schools), which showed the influence of the new ideas in classics reduced (and at the same time broadened and given a new purpose), and in science increased and accorded a definite place; by the wonderful changes that took place in old schools like St. Paul's, which made provision for several parallel curricula and devoted itself more especially to preparation for technical and commercial pursuits, while offering a typical classical curriculum to those

who desired it;[4] by the curricula of many other grammar schools, old and new, in England, as well as by the modern secondary curricula that budded from the popular schools; by the revision of the French Lycées that gave free play to modern studies and applied modern methods; by the substantial curricula of the French higher primary schools also that supplied popular secondary instruction; again by Austrian secondary schools which took the lead in modernizing themselves; and by provisions for various technical and special schools in the direction of commerce and the arts, in all the countries named.

The High School and its differentiations.— Finally the movement was illustrated, and more fully illustrated, by the inauguration and development of the most unique and promising secondary school that had yet appeared, our own High School, that gave equal facilities for old and new and made possible many different curricula applicable to many conditions and ends.[5] More particularly was it illustrated by the growth of differentiated high schools brought into existence by the new influences in order to prepare the youth of the nation for the new industrial times,— the English high school, the commercial high school, the manual training high school, and finally the agricultural high school.[6] The demand for a

[4] Compare this with the simple and exclusive aim of its founder. See page 266.

[5] There are three things to be noted here in connection with our American high schools: — 1. The new studies are prominent; 2, within the same school several curricula are offered; 3, there are various types of secondary schools representing different central ideas and adapted to different circumstances and communities; 4, cultural courses are fundamental in all the schools, which is only another way of saying that all professions and occupations are becoming culturized. The same points may be noted in other school systems, but for the most part on a smaller scale. With these changes the new studies have gained fairer conditions for development and application. There are thus differentiated curricula within the same high school and differentiated high schools. Both policies are now working in high school education. Another chapter will discuss the relative merits of the two.

[6] It would not be consistent with the general plan of this chapter to go more fully into the history of the high school. That is reserved for a succeeding chapter. The detailed development of secondary education in foreign countries must form the subject of a separate volume the purpose of which will be to trace the growth of secondary school systems in different countries and to show their present status.

broader and more technical training for the more common vocations, in place of the empirical work that had prevailed, brought in also vocational studies of other types that pointed to other kinds of vocational schools. But this latter movement looked to the future and cannot be said to be characteristic of the period under consideration.

Higher education to supplement secondary education.— These high schools were finishing schools on the one hand; on the other they were introductory to a more scientific study of the principles and technique of industrial and technical pursuits, as well as to a fuller and more effective study of old objects of interest. For these differentiated high schools new forms of higher education arose to extend and supplement them,— the technical college and kindred higher schools. Business itself, and particularly the trades, were soon to organize for cooperation with vocational education, and thus to serve as an industrial university. With a broadening of the secondary school there thus came a broadening of the scope and a multiplying of the ministries of higher education. An age of great expansion in college training was at hand. The tendency to disparage such training as a preparation for business life was passing.

New studies.— The studies that during the period styled the "Enlightenment" began to be distinct forces in the curriculum, as opposed to the mere attachments that the best mediæval education had made them, now secured definite recognition and even assumed a predominant place in the curriculum. They so planted themselves in public thought and so justified themselves in pedagogical thought, that one can conceive of no change that would overwhelm them, as did the "New Humanism." And yet they are even now in a comparatively crude state, both as to selection and organization of material adapted to secondary education, and, in a degree, as to method of teaching.

Differentiation and special curricula.— Among the phases of growth that have just been referred to in relation to the adoption of new studies and new curricula none is more interesting than that which has to do with differentiation and specialization in courses and curricula. It was due to two forces,

first to the demand for special preparation for special lines of work, on the basis of a fundamental general culture common to all interests and necessary for the consummation of this special training; second, to the study of special psychology,—particularly the psychology of adolescence. Differentiation at a certain stage is essential, from a consideration of both internal and external conditions of education, if the best is to be done for the human and material interests involved.

Growth of educational terminology — Program of studies — Curriculum.— In this development in the secondary school old studies grew, some studies branched, some new studies joined the group. Altogether there was a wonderful development on the study side of the secondary school. One is impressed with the wealth of choice and opportunity. Teachers found it no easy task to pick a safe way. In the periods described in Chapters XII and XIII the program of studies[7] was simple, clearly defined, fixed. Program and curriculum

[7] As we have reached a point where a differentiated terminology is necessary the following definitions of Dr. Johnston, of the University of Illinois, are significant. The terms referred to will be used in the following pages in substantial accord with these definitions.

"*High School Subject*" denotes any distinguishable field of knowledge where subject-matter of instruction makes it practicable and desirable that one or more courses or half-courses in it be offered in the high school programme of studies.

"*Course of Study*" means the quantity, kind, and organization of subject matter to be covered by a pupil in any high-school subject within a definite period of time and for which a credit unit or a fraction of a credit unit toward graduation is granted. "Second year Latin" is a "course of study."

"*Credit Unit*" represents a year's study in any high-school subject constituting approximately a quarter of a full year's work of a high-school pupil. With any four-year high-school curriculum as a basis a school-year of from 36 to 40 weeks is assumed, and it is further assumed that a school-year's work in any subject will approximate 120 sixty-minute periods, and that any course of study will be pursued for four or five periods per week.

"*Programme of Studies*" refers to all the high-school subjects offered in a given school without reference to any principle of organization of these into curricula.

"*Curriculum*" refers to any systematic and schematic arrangement of courses of study extending through a specified number of years and leading to a certificate or diploma that may be planned for any clearly differentiated group of high-school pupils. A four-year curriculum should represent not more than 16 (and not less than 15) units of work.

"*Schedule of Classes*" is the daily and weekly tabular arrangement

were identical. There was but one curriculum. In the following period study conditions were in general the same, though the program was growing, and richer and more stimulating material was offered. In the epoch now under discussion, however, the program became so large and complex that several curricula were evolved, now in the same school, now in separate schools. These curricula served as paths through the tangled growth of the program of studies. They were as yet imperfectly laid out. They sometimes formed a barrier rather than a help to choice, partly because studies were not well grouped, partly because curricula were isolated. There was thus an enticing opportunity to improve the organization of secondary studies, to unify divergent school interests, and to correlate the curricula that represented these interests.

But there are two phases of secondary school life that have not yet been noticed. During the period they were growing equally with other phases. They are destined to become intimate parts of any curriculum and to require quite as much attention as parts that are more technically included in it.

1. **School social life.**— Great freedom was allowed in school life, compared with the restriction and repression of other days. Coincidently there was a decline in home nurture. As a result the social side of school life had a marked development, particularly in this country. The high school pupil is preeminently a social being. A new growth of the social instinct, and a consequent growth of intimate group interests in great variety, now smaller as in chum life, now larger as in societies and clubs, are characteristic of adolescence. They have a perfectly natural development at the high school age, and are to be definitely provided for in the curriculum. Guidance and direction are urgently needed. To be really effective,

of classes showing time and place of meeting and the instructor in charge of the course.

"*Department*" in high-school work refers to that grouping of high school subjects which indicates the administrative policy in the assignment of subjects of instruction to teachers. It may be applied to any feasible administrative unit in the distribution of instructional work to teachers which is based on educational principles, the assumption being that there are very desirable possible groupings and very undesirable possible groupings; e.g., Department of Science, Department of English, Department of Vocational Guidance.

however, they must be of the adolescent, not of the adult type, i. e., must be informed with sympathy with the adolescent. This type of guidance was not forthcoming in the period under consideration. Adolescent life was warped by the intrusion of certain artificialities, by school and parental indifference, and otherwise.

Club life.— The club life of the adolescent gave more concern than some other forms of activity. It is important only because it is one of the modes in which the social instinct expresses itself. Association would be a better term to use, because it suggests a broader view of this side of the adolescent and a simpler and more natural solution of the related problems. One form of club life was more conspicuous, though not more important, than others, and awakened more anxiety, chiefly because the whole matter was neglected. In their eagerness to meet the demands of the social nature high school pupils adopted the idea of the university fraternity. Unordered, unorganized, and, in general, unsupervised, the idea had a wild growth, till it was seen that untutored adolescents were becoming overmastered by an instrument that had proved not without danger for older students. It had been adopted, but not adapted. With an inherent carelessness and reluctance to analyze, the secondary school had borrowed instead of inventing something of its own,— a dangerous process. School authorities thus found a serious problem confronting them. It was met in different communities in different ways, now by supervision, now by repression. Neither way is final, the first because it does not yet fully attack the problem, which is one requiring a careful study of adolescent interests and adaptations to them in an educational spirit; the second, because the adolescent is naturally gregarious and a lover of mystery. Repression that does not re-fill with something more adequate is incomplete, not to say vicious. A vacuum is abhorrent to human, as to physical, nature. The solving of the problem thus went to the twentieth century high school.

2. **Play.**— During the last century it came to be recognized that play involves mental training,— that it performs an important part in promoting mental development and in producing mental alertness, that it may be as truly educative as

any phase of school life. England was the great play country of Europe. She had long had her play organized and had given solicitous attention to its development as a part of her national educational creed. The English people alone of the great European nations did this. Other nations had, and still have, little inclination in this direction. We must thus look beyond Europe for the most marked development of play activities and play education in connection with the public schools. Here in the United States secondary education had the largest growth, during the period under review, and practically became universal,— conditions precisely adapted to the free exercise of the play instinct. Play results however were as unorganized as in the case of social activities. There was much of the primitive in them. Virgin soil is always conducive to rank growth. Conditions were modified by certain reformations, discussions, regulations, and supervision. But there was comparatively little scientific study in the case; it was of an empirical sort. Still, more careful and more sympathetic attention was given to play than to the social side of school life, and more system was secured. Results were therefore more satisfactory. A real attempt was made to minister to adolescent needs. It should be said, however, that the social problem is more difficult and intricate and that it is harder to meet because of its secretiveness. As in the case of the social problem, a fuller solution of the play problem was left to the twentieth century.

Secondary education for both sexes.— One further point should be noted in giving the general history of the period. With the popularizing of secondary education it was to be expected that secondary schools would eventually be open to both sexes. But, because of the momentum of long custom and a predisposition to be skeptical as to the education of women, the idea had to wait long for fulfilment. The nations of Europe granted the new privilege to woman slowly. Even to-day England provides little public secondary education for girls.[8] Our own country, almost from the beginning of public

[8] England added some elements of secondary education, for boys and girls alike, in connection with the free popular schools. This addition was a budding of popular education, but it was repressed by the cold-

secondary education, opened its secondary schools to both sexes alike.

But winning a privilege is often inconsiderate of meanings and relations. It is largely objective. New educational movements have their aftermath of problems. Only the principles that support the movements are stable. Educational machinery for applying the principles, like all machinery, needs adjustment and further invention to keep it equal to conditions. This movement for the higher education of girls was no exception to the rule.

Some of the problems that secondary education for girls brought are general, some grow out of coeducational secondary education, and are applicable particularly to the United States where this policy early established itself. The solution of these problems is not an academic matter, nor one of external thinking. The question of the higher education of woman is at base psychologic and civic,— broadly sociological. It has been made economic and narrowly social. Its main proposition needs no further arguments,— it has become axiomatic. But the needed adjustments of the new policy require patient gathering of facts, a thorough study of the sexes, physiologically and psychologically, a re-studying of sociology, and, perhaps, a reorganization of home economics.[9] The present century has the problem fairly before it.

Present influence of the secondary school.— It is evident from what has been said that the secondary school in this epoch became a far larger factor in individual and national development than formerly. In standard it was equal to the old college and beyond it. In ministry it aimed at universality. This broadening of aims and spirit from within, in response to new conditions, was accompanied by a modification of influences from without and a gradual change in the relations of secondary and higher education.

Preceding chapters have shown in detail how the secondary school became bound to the university as its preparatory

ness of a deep-seated prejudice against free secondary education for all the people.

[9] Some of the main points in the history of the movement for the higher education of woman, and brief reference to the problems entailed, will be found in the Appendix.

school, subject to its direction. The establishment of preparatory departments in college and university was only a minor episode in this history. It was an emergency measure, and as such only temporary.

Relations of secondary school and college modified.— Early in the nineteenth century the preparatory department was definitely excluded from the university. This meant for the university an advance in the "arts course,"[10] so that it could be placed on a par with other "courses."[10] It did not, however, affect the fundamental relations of secondary school and university. It simply gave a partial opportunity for broadening these relations.

In the broadening process that went on in secondary and higher schools the narrow and formal requirements and relations were modified by the reciprocal influence of the two, so that conditions for entering the university became broader and freer[11] than formerly and had more regard for the genius of the secondary school. This came about in the midst of much debate. Discussions and conferences, committee work and reports, agreements and concessions form one of the most interesting episodes in secondary school history. With all its interesting details it would furnish material for a volume. It should be said, however, that in these modifications the secondary school had to take the initiative and, in a sense, force the issue, in order to adapt itself to the demands of its situation.

City and state control.— From what has been said at different points in this chapter it is evident that secondary education underwent other changes. Its external relations, aside from those that connected it with the university, had a very

[10] Here used in the old sense, as stereotyped expressions.

[11] Instead of the old specific requirements of subjects, and sections and amounts of subjects, the college introduced the principle of credit-units, so that the requisite number of units might be secured by various combinations, giving considerable latitude in the choice of one's secondary school curriculum. A student graduated into college or into life because he had won so many units, not because he had covered so much ground or had "passed" so many studies. The plan was not a consistent and genuinely educational one, but it did give more latitude to the individual and more freedom to the school. It was a step toward the power test for advance in education. See XXIII, p. 413.

interesting development. From being merely individual, responsible only to some local organization and to local prejudice, secondary schools became a part of systems, city and state. They thus became fully secularized. We have already noticed the first step in this systematization (Chapter XIV). The schools enlarged their relations in the seventeenth century and became responsible to state systems.[12] But state systems in the fullest sense were the products of the nineteenth century. To take some of the typical states in Europe, Prussia, of course, occurs to one as the earliest and most conspicuous example of full articulation and systematization. France followed. England still delays. The English government long ago took an interest in education[13] and established a kind of "code" governing secondary school management, but even as yet there is nothing that can be called a system. System is hardly characteristic of England in any direction. Solidarity is attained in other ways.

Our own States furnished the only example of free secondary education of wide-spread application. They organized it on the basis of cooperation by state and local authorities. As a rule the establishment of secondary schools depended on local initiative, the state government establishing only general regulations and occasionally offering some financial assistance.[14] But in some States, notably in Massachusetts, *provision for secondary instruction for all children* was made compulsory.

[12] Saxony and Württemberg were probably the first to really enter the field of state systems. Previous attempts at state control need hardly be considered here, so far as permanent results are concerned.

[13] De Montmorency has told the story in one of the most interesting of pedagogical books, "State Intervention in Eng. Education."

[14] In the United States secondary education is a regular part of state systems in the various states. It is permanently secured by state regulation, and is so distributed as to be made accessible practically to the whole school population in most localities. Local initiative at first was the only source of free secondary education. It is still given free play, so far as consistent with general state requirements for providing secondary schools. The finances are a part of the local budget, but in certain cases state funds are also appropriated to aid and encourage the growth of these schools, known universally as High Schools, and to ensure certain courses of study. While private secondary schools, known by various names, abound in all parts of the country, the High School is the typical secondary school agency in all the states and is amply provided for by local, state, and national sentiment and resources.

Even here, however, system did not reach the stage exemplified in Prussia. Individual initiative, spontaneous development, and adaptation to local needs still had place and assured a fresh and vigorous growth. Beyond the special points just referred to the natural ambitions of men in a free country pushed the establishment of high schools about as far as a central authority could go. Our high schools were a spontaneous outgrowth of public sentiment,— the natural budding of our elementary schools.

Summary.— This spontaneous growth of secondary education and its instinctive reactions to the social and industrial conditions of the times, culminating in the differentiation of curricula and schools, gave the secondary school new life and freedom. It was a maturing of secondary school instincts and ambitions. Through it all the school was gradually assuming the counterpart of the position that it held at the time of the old tribal secondary school,[15] when it was the only school known. In this position it was eventually to be as fully responsive to modern, as it was before to primitive conditions. Educators were coming to see that the high school is not a subordinate, but a cooperative and coordinate agency in determining and fulfilling educational policy, and as such sure to have a wonderful future. It had not yet accomplished this position, for there was much that was indefinite and indecisive and uncorrelated in its action. It was not yet fully conscious of its real mission, not yet settled in its real ends and aims, but it was making headway.

APPENDIX

Brief résumé of the growth of secondary education for girls.— The subject of the higher education of woman is sufficient for a book. Brief reference to some of the main points in its history is all that will be in place here.

We found in studying Roman education that woman had notable influence there and was accorded unusual privileges in secondary education that advanced her immeasurably beyond the position of the Greek matron. After Rome she lost this commanding position in education and dropped into an obscure place from which she has only recently rescued herself. In the Middle Ages and later she shared the

[15] See Chapters I and II.

cloister education, it is true, but it is doubtful whether it could be called in any degree secondary, as in the case of that prescribed for boys, except that it was the education provided for adolescent girls. Great educators pressed the thought on the educational world, but it was not till the latter half of the nineteenth century that conditions were essentially changed. Eighteen centuries of educational history since the beginning of the Christian era were practically a blank in the matter of secondary education for girls.

The great nations of Europe hesitatingly accorded the new right to woman. Till recently it was left largely to private initiative. But the policy made sufficient headway, even in the most conservative countries, to give the principle some standing and force. France was more spontaneous in the matter than other foreign countries, and freely lent state influence to the movement. The United States accorded the new secondary school privileges unreservedly, and did it early. The academy movement, in the early part of the period we are reviewing, gave almost the first substantial secondary school privileges to girls. Sometimes academies were intended simply for advanced education; sometimes they were expressly planned for training teachers, and thus served as the first normal schools. The special agitation for a free girls' high school, following the establishment of the English High School for boys in Boston, in 1821, was the next notable step. Finally the wonderful development of high schools in the latter half of the nineteenth century assured free secondary education for all the people.

The non-sexing of secondary schools is one of the most interesting phenomena in educational history. A perfectly natural phase of this non-sexing, especially in America, is co-education, and a striking result of this latter policy, due partly to pedagogical and administrative mistakes, is that girls outstripped boys in our high schools, both in numbers and scholarship.

Problems involved.— Since the achievement of free public secondary education for girls through our high schools several problems have shown themselves. One problem is a social one, the discussion of which has thus far been so meager that the problem itself has hardly taken final form, though it is evident that there is something that demands careful thought. Another problem has to do with the question of curriculum,— whether the same studies are adapted to the two sexes. It is plain that psychical differences correlate with physiological differences, and that differences in vocation and in social functions should affect the curriculum, but it has not yet been satisfactorily settled that differentiation is necessary in the secondary school.

There is however another and more definite problem based on a difference in physiology and psychology between the sexes. In the early high school course the girl is found to be two years in advance of the boy in physical and mental development. Hence the boy is impressed with the spectacle of seemingly falling behind in the race,

and teachers are goaded by the disparity into unsympathetic attitudes toward the delinquents. This divergence in growth would seem to suggest some separation of the sexes, in some subjects at least, during a part of the high school course. If we follow what seem to be the soundest principles of election, we get some help, it is true, but the problem still persists. Even if election could go further, the two sexes would tend to group themselves about their individual curricula through feelings stimulated by temporary, rather than permanent, conditions, as will be seen from what has just been said.[16] The problem must be met by a better understanding of adolescence on the part of teachers, which will come through better professional training; this will bring better appreciation and sympathy and hence wiser dealing with groups and individuals.[17]

A fourth problem has to do with physical development. The question has been raised whether, in the close association of the sexes in large numbers, under loose supervision and without adequate physical direction and training, the development of sex qualities is not unduly and unhealthfully stimulated. It is an undeveloped problem at present and goes to the twentieth century with some incisiveness.

[16] This is shown by the course of events in colleges, where such artificial groups are forming, narrowing the curriculum of both sexes. Certain courses come to be known as girls' courses, certain others as boys' courses. Hence a new kind of caste arises.

[17] See Note 7, page 420.

XX

SECONDARY EDUCATION IN THE NINETEENTH CENTURY — PRINCIPLES AND PRACTICE

Contributions of the period to the "new pedagogy."— In following the external history of the period it has been evident that the secondary school made rapid progress pedagogically. In fact the most significant progress was made in this direction. If we are to understand the new epoch in secondary education, we must consider this side of its history. We shall take up here, however, only a brief survey of this inner history of the 19th century, noting the most conspicuous contributions to the principles and practice of education.[1]

1. **A new psychology.**— First then we should notice that, as a foundation for the new growth of pedagogy, the nineteenth century developed a new psychology. This psychology, in the first place, emphasized the unity of mind in place of the old disintegration represented by the older "faculty psychology"; in the second place, it gave a more concrete and physiological aspect to the science, instead of the former abstractions, thus awakening a new interest in mental hygiene; in the third place, it gave a specialized psychology,— the psychology of childhood, the psychology of adolescence, and pathological psychology, with the psychological clinic. Of the special psychologies child-study developed from fragmentary and often ill-advised work into a science, useful and used in every elementary school-room that pretended to be modern; the psychology of adolescence, more important for our purpose, also attained the dignity of a science, but had less effect on the secondary school than the first on the elementary school. Its fuller adaptation and application to the problems of second-

[1] Most of the gains here noted belong to the last half of the nineteenth century particularly, and so represent the culmination of development, rather than the general practice of the whole period.

ary education is the work of a new century and offers an inspiring opportunity. The third, pathological psychology, was of service to the exceptional child and to the community, often saving the child to himself and to society, and making him a positive instead of a negative factor.

2. **A new philosophy of education.**— A new philosophy of education came to view. Every teacher who is more than a mechanic studies relations and meanings, and unifies educational facts by reference to some central idea that gives them consistency and significance. This is his philosophy of education. So the educational world as a whole, through some able exponent, makes a philosophy of education. Sometimes this philosophy is no more than an interpretation of the history of civilization from the point of view of education. Sometimes it is an attempt to give a new and more helpful direction and radiation to educational thought and practice, and a more helpful insight into educational processes and organization. The basis is sometimes biology, sometimes sociology or psychology. In all cases it represents an effort to unify and correlate, and hence to focus attention on fundamental ideas. The secondary school shared in the inspiration of such philosophy, though perhaps less productively than other schools.

3. **A change in the direction or point of view of education.**— As a consequence of the new psychology the direction of education, or the point of view of education, was changing, at least in the minds of the most thoughtful educators. Formerly school training was an external matter brought to bear on the pupil and working its way into the inner forces; a systematic course of study disciplining the powers was the central idea. The more fruitful idea of the period under discussion was that the direction is from within outward, that education is the development of power under wise and sympathetic guidance, a natural growth based on the laws of general physical and intellectual evolution. This point of view is genetic and sociological, and it has peculiar significance in the adolescent period.

4. **An enlargement of aim.**— The aim of education therefore changed. Instead of the somewhat hazy idea of disci-

pline, and the more definite and absorbing idea of the development of a study-subject, came that of the development of character, and training for community life, to be considered in its highest significance. The idea of character itself grew immensely. The broadest definition of education made it a process which gives, 1, mastery of environment, developing all one's powers to their fullest possibilities, by using and directing self-activity in productive exercise in this environment; 2, power to apply and create.

Secondary education therefore, in its larger significance, now proposed to give the student power not merely to comprehend, but to use his inheritances and his relations in science, literature, art, religion, and civic and industrial functions.

5. **Growth of Method.**— Method had a striking development. 1. Its psychological basis changed. In the direction of general method, a progressive development of all kinds of power, whether mental or physical, took the place of the older idea of developing separate faculties at special periods. Each phase of mental or physical life has its appropriate development at each period, and requires as much care in each period as it does in the period when it predominates and gives tone to life. What was to the older psychology a separate faculty was now found to be only one phase of a unified mental life; through it the whole mind, better the whole man (since physical and mental are closely correlated), was conceived as working, each part of the whole making its own special contribution to the special phase in question. As to order and organization, method became more developmental. An educational process that takes, as its foundation, interest in the concrete and real contact with things, and with fine sympathy stimulates a natural growth from this basis to wider and wider generalizations suited to, and hence appreciated by, the growing adolescent at different times, and thence to abstract thought, likewise by gradation, lays the surest foundation for intelligent citizenship and productive service. Such a process uses natural interests and builds acquired interests wisely and broadly, so that the latter readily reach out to all grades of intellectual and physical work. Such a method and the user of it infuse the educational process with an inspiration that appeals pecul-

iarly to the secondary school pupil and wakens enthusiasm through which he expresses himself. In this process educators were not bringing elementary school methods into secondary schools, as might seem to be the case from emphasis on objective work. Both schools represent a cycle of method-elements beginning with the concrete and leading up to the general. Interest of the secondary pupil in objective work is a very different thing from that of the elementary pupil,—broader, richer, more suggestive, and involving more points of view. Similarly the abstract in the elementary school is very different from the abstract in the secondary school and has a different function. Failure to recognize this difference has relegated concrete and objective work chiefly to the elementary school, whereas its most promising field is in the secondary school.

2. The form of method changed. From being predominantly deductive and didactic, at its best it became inductive in all directions. This was seen in the various forms of inductive work in science; but it was seen as well in the position of the rule in arithmetic, which now stood after the concrete illustrations; in the laboratory method and original proposition in geometry; in the source method, of different forms, in history; in the development of grammar through, and in connection with, language, making grammar in fact a derived and advanced subject, rather than a fundamental one; and in the correlation of rhetoric and literature. The new methods were not yet universal; most of them could hardly be said to hold a conspicuous place in the economy of the secondary school. But they had a striking effect on procedure. The laboratory method in science was the most firmly fixed of all, though not yet perfected. The laboratory method in geometry was found in the schools only occasionally, but the old abstract method was modified by the laboratory idea. Similarly the source method in history was seldom found in its type form, but the old rote methods gave place to more educational ones that adopted something of the source idea, in the direction of investigation and discussion. The formal classical method in foreign languages generally yielded to the idea of the direct method enough to relieve it of what was most hampering.

Thus, while much of the old order and its abstract procedure was still found in the schools, formal methods gave way to a certain extent to developmental ones, and were, sparingly and reluctantly, but surely, supplemented by objective work and the spirit of individual thought, observation, and experiment. Much therefore was done to give a clearer and more vital contact with educational material and forces. The new became prominent enough to characterize the epoch, though needing to be worked out far more scientifically and with far more appreciation of its true meaning.

6. **The elective principle.**— The principle of election came into the economy of the secondary school. It came because the number of departments of knowledge worthy of study by secondary pupils increased to such an extent that no one could even touch them all, to say nothing of real initiation into them, which is the secondary pupil's natural heritage. It came also because it had become necessary to adjust school programs to individual needs and to special ends.[2] In carrying out the principle there was an attempt to find, among the subjects of the secondary school program, a " core of constants," to which different more or less consistent groups of studies might be added to suit individuals and to prepare for special occupations and professions, as well as for advanced courses of study.[3]

7. **Discovery of secondary school principles for a secondary school philosophy.**— The discontinuance of prepara-

[2] Of course such a principle would receive at first incomplete and even crude application and would be subject to mistakes, even serious mistakes, in applying. It has not even yet fully found and occupied its place. The principle is good and meets a very definite need. With wise adjustment it will fulfil effectively its legitimate functions. This, however, is not the place to argue its merits or defects, but to record its adoption into our system of education and its limited adaptation to secondary education. It was generally applied to curricula rather than to individual studies, but the latter application was not wholly excluded. Naturally, with this departure from the fixed curriculum idea, qualifications for promotion and graduation were based on units of work done, rather than upon the completion of specified studies. This point, however, will be taken up more specifically in a later chapter.

[3] It was as a consequence of this broadening and adapting of the secondary curriculum, giving greater play to individual initiative, that the colleges revised and liberalized their relations to the secondary school by making their admission requirements depend in part on units of work, instead of wholly on prescribed studies.

tory schools by the universities and the broader and more elastic admission requirements, taken in connection with the great increase in variety of secondary education coming through differentiation in secondary schools, make it evident that there was a change in the spirit of secondary education. The secondary school came to appreciate, in a degree, its own significance and power. It therefore discovered sound principles for developing in itself school feeling, thought, and judgment. It became a thinker, no longer dependent for policy upon the thought of other schools that did not have its point of view and upon doctrinaire schemes; it had attained its majority. To have discovered real secondary school principles for judging of ends and means and for interpreting general educational policy was one of the most important achievements of the time. A real secondary school philosophy was at hand. It remained to incorporate the principles thoroughly in the working programs of the school and to work out the philosophy.

A new school agency — A training school for teachers.— But the times demanded a new and more effective instrument for utilizing all the gains of the age. What should it be? The old formal curriculum, together with the simple method, inherited from the later Renaissance period, that required of teachers only scholarship and power to grasp traditional forms, had passed away. Broader and more intricate schemes of secondary education were developing to meet individual needs and to give pupils preliminary initiation into a more and more complicated and exacting business and professional world. These were awakening genuine interests and enthusiasms that would lead pupils finally into the technique of the particular form of life suited to them. The idea of special training for one's work had become prominent and impressive. Why should not teaching share in this idea? Particularly the new science of education which combined the psychology of education, the philosophy of education, and educational sociology, as well as methodology, was pressing its claims. It was supplying motives, principles, and practices calculated to lead to a surer fulfilment of secondary school ends, especially its new ends. All this was felt, if not expressly acknowledged. Altogether

teaching was forced to regard itself as a profession for which special training must be provided. There was thus needed a new institution that would focus the new principles and ideals and train workers and leaders in a new education. Thus came schemes for the professional training of teachers, and the normal school,— model school or school of norms,— for administering those schemes.

The normal school.— The new school began in this country at the end of the third decade of the nineteenth century. It began much earlier in Europe. In fact an occasional normal school was found in the Renaissance period, when the normal school idea had its inception. It had a wonderful effect on the elementary schools, making them far outstrip higher education in efficiency.

Training for secondary teachers.— The spirit of professional training reached the secondary school partly through the influence of the normal school, partly through an indigenous influence in the secondary field itself. Training for secondary teachers began in Europe in the eighteenth century and grew with varying results. In this country the normal schools at one time offered training for both elementary and secondary teachers, and, as a matter of fact, sent many graduates into the secondary schools. But, being organized particularly for training elementary teachers, they were inadequate for preparing teachers for the new secondary education. They failed to attract students who were scholastically equipped by college and university training for secondary teaching. There must therefore be some special agency to supply professional training for these students, if they were to come up to the new ideals. Scholarship alone could not fit them to cope with the teaching conditions that confronted them, though there was a prevailing college notion that this was enough. Secondary school teaching required first of all a study of the secondary school pupil, who is radically different from the elementary school pupil psychologically and pedagogically. It required also a careful study of the subject matter of curricula with special reference to secondary school needs. To focus and apply all this in teaching it was necessary to develop a method adapted to adolescence. The problem of secondary education

had become so large and complex and ideas of teaching had advanced so far that there was a demand for a product different from that which college or university could supply by their typical courses. Hence the rise of a new training school. It was supplied in higher schools of learning by different plans and was called by different names, now department of education, now school of education, and sometimes college of education.[4]

In this country small beginnings of this new school appeared toward the end of the last century. It was slow in coming and slow in growing, probably because of the stubborn academic feeling that the college as then constituted gave training enough, and because of a prevailing college tendency to disparage normal school standards and normal school work, with which the new training plans were rather loosely associated. Before the century closed, however, there was conspicuous activity and development in the direction of special college training for secondary school teachers. Means were crude and inadequate, and there was little progress beyond a very general training, except in one or two conspicuous schools. Professional training for secondary school teachers must be broadened and deepened and more thoroughly organized. Particularly must it provide larger opportunities for specialized training for teaching secondary school subjects and for understanding secondary school administration. For this purpose it must supply larger facilities for practical work.

General characterization of the period.— As the secondary school became a subject of study on the outside and inside, in its relations to curriculum and method, teachers and pupils, town and state, and as this study took practical effect in better provisions for secondary education in all its phases, there were better conditions for the working of the law of natural selection, in relation to both teachers and pupils, and surer ground

[4] For the best complete and detailed account of the rise and development of professional training for secondary school teachers in this country see Professor G. W. A. Luckey's book on this subject. Other matter on the topic will be found in the history of certain academies, which were of much service in training teachers at a critical period in our educational history. The academy was sometimes merely a seminary for teachers.

for sound development in all directions. The secondary school was coming to serve community interests more effectively. There was, however, need of further organization to bring fragments together, to establish just relationships, to secure and give meaning and steadiness to elements now drifting rather aimlessly, to orientate parts by connecting them with the secondary movement as a whole and with society as a whole. This must be accomplished in the new century.

Needs.— Secondary education had an exuberant growth during the last century. Its most striking general characteristics at its end were, on the one hand, its breadth and variety, and, on the other, its lack of unity and settled aims. Its course of development and the results cannot be better illustrated than by the history of our High School, which will form a fitting close for this story of the growth of secondary education.

XXI

THE HIGH SCHOOL — DEVELOPMENT OF SECONDARY EDUCATION IN THE UNITED STATES

Beginnings of our educational policy.— Our English and Dutch ancestors settled the educational policy of our country. They brought in educational traditions, forms, principles, and habits that are felt to-day. Their policy has grown with the country and has received infiltrations from other sources that have accelerated, or retarded, and otherwise modified, its growth. The more important of these infiltrations, however, have come from sources that had the same general ideas of education that prevailed in the home countries of both peoples.

Nature of early schools.— When our English fathers came, they were familiar with the "grammar" school system that furnished in England more wide-spread opportunities for education than existed at the beginning of the nineteenth century.[1] The Hollanders, too, were accustomed to an enterprising system, rather better, if anything, than the one in England. The educational habits of our early fathers worked themselves out in schools immediately after their coming,— schools that were copies of the ones they knew and attended in the home countries. Doubtless standards became somewhat diluted here because of pioneer life and because the most famous schoolmasters remained at home. At the same time the freshness and vigor of the new life gave opportunity to break from tradition, and to substitute for slow, conservative development a quicker and more spontaneous growth. This made itself felt later.

First secondary school — The "Grammar School."— Whatever may be said as to elementary education, there can be no question that the secondary school started in New England. It has spread thence over the country, modifying itself to suit

[1] See Chapter XVII, p. 279.

time and circumstance. Schools sprang up spontaneously in the first years of settlement, the Boston Latin Grammar School being the pioneer. But the famous rescript of the General Court of the Massachusetts Bay Colony put the matter on a legal basis a few years later (1647), and every community of 100 families must thereafter maintain a grammar school or suffer the penalty of the law. Thus began the first secondary schools in America, the grammar schools. They were outspoken preparatory schools for Harvard College, which was only a little more advanced grammar school.

The curriculum.— Curriculum and method were copied from the home grammar schools. In fact, we must think of an average Renaissance school in England. The early curriculum of St. Paul's school, which was established about this time and attracted wide attention from its enterprising spirit, was religious instruction, Latin, and Greek. The colonial grammar schools had a similar curriculum, with the emphasis on Latin; but arithmetic was added in some cases, and, owing to the exigencies of the times when primary instruction was precarious, reading and writing had to be taught to give the necessary preparation for undertaking secondary studies. Requirements for admission to Harvard, which were a kind of gauge of grammar school accomplishment, were ability to read any classical author into English readily, make and speak true Latin, prose and verse, and perfectly decline paradigms of nouns and verbs in Greek.

The method.— The method was the typical grammar method, which, it will be remembered, had been relieved by the new Renaissance text-books. One of the famous beginner's books of the time was produced in the colonies by Ezekiel Cheever. It was similar in type to the books described in the appendix to Chapter XVI. The method in general was probably neither better nor worse than that which prevailed in the Old World. It was improving, but was still hampered by the fetters that Sturm and, before him, mediævalism, had forged.

These grammar schools represented the earliest efforts for secondary education. The New England colony was noted for its enterprise in education and sent its enterprise westward when the time came to send colonists there. New York and

New Jersey in lesser degree took up secondary education and added the weight of their influence in establishing a double standard of instruction.[2]

Decline of the grammar school idea.— But on the whole the grammar schools did not prosper, so far as increase in numbers was concerned. The early settlers' minds were divided and distracted by wars and rumors of wars; for the rest, men were busy with making their way in a new country. As the Revolution drew on these conditions were intensified. In addition to this, the resources of the colonies were drained, so that financial difficulties hindered the spread of grammar schools; at any rate they furnished convenient excuses for escaping the law. Outside of these circumstances, there were others of a social or religious nature that prevented the enthusiastic application of the grammar school idea. The spectacle of men winning their way and attaining great influence without higher education was not without effect.[3]

But we may suspect that the main reason for the halting of the grammar school lay deeper, in the character of the schools themselves. There was a deep-seated indifference to them that would have prevented an easy acceptance, even if other conditions had favored. The colonists from their very situation were forced to be "practical" men. They could hardly see how Latin, especially the Latin of the grammar school, could help them in "winning the wilderness." The average boy needed it not. The few who were to enter the professions must of course take the time honored preparation that was

[2] Besides this secondary education supplied by the grammar schools, some secondary instruction was also possible in connection with the common schools provided by the same act of 1647, and by the earlier act of 1642. These schools were manned by college men who, for financial reasons, combined study and teaching and offered "extra" opportunities to individuals to take up some secondary studies. Many a boy was helped toward college in this way. This was a later development of secondary instruction, but still it came early and existed side by side with grammar schools. It should perhaps be more properly considered a little further on. (See page 327.) These two agencies long supplied secondary education for the colonists, and it was of no mean sort, as education of the time went.

[3] Martin in his Evolution of the Massachusetts Public School System has in a very interesting way followed the history of these grammar schools, and has gone into the matter more fully than is called for in a chapter of this character.

supposed to be the key to higher education and training. "But why," the pioneer might ask, "should my son, who is to be an industrial worker or leader, require this by-gone curriculum?" Such feelings, even though unexpressed, quite possibly worked against the grammar schools. How else shall we fully explain the quiet opposition of the people, and the reluctance of the sheriffs in serving writs, when the law enjoining the establishment of such schools was violated? Such an attitude could not have existed if the service of these schools had been regarded as vital. This feeling would have all the more force because such practical ideas as have been noted in Chapter XIV and elsewhere had come into education and were bearing fruit. Industrial and trade interests had already made their contributions to certain schools in the form of new studies that were proving their worth, before colonists put foot in the new country.

What has been said would hold good with grammar schools at their best. It has to do with numbers only. But the schools probably declined in quality also. The curriculum, from its very nature, had in it the seeds of formalism and decay. With so little applicable to practical life and capable of adaptation to changing conditions the school must in time lose life and enthusiasm.

Need of a more adaptable school.— From all the circumstances in the case it was finally evident that the grammar schools were entirely inadequate to the demands of the time. Some other school agency or agencies must be forthcoming to meet the current needs.[4] The old demand for secondary education remained. Better conditions and the improving circumstances of many individuals brought a call for higher degrees of education. Culture ideas were growing; the country was smoothing its homely but attractive and honorable roughness. It was, however, a new culture idea, not the old, or at least it was the old with important additions, that was needed.

[4] Yet grammar schools continued to be established. As late as 1759 a legacy of £388 was given the town of Lincoln, Mass., to support a grammar school forever. For 60 years the income was paid only to such teachers as could teach Latin and Greek. This led to the more general employment of college graduates and undergraduates and tended to give a more substantial character to the school.

The "popular" secondary school.— The need was met by two schools, only one of which has been noticed, or at any rate adequately noticed, in histories of education. The first was the "district school" that grew most naturally out of the life of the people. The grammar school was an imitation; it came from without. The district school came from within. It grew up, as the practical "common" or "elementary" school, to suit the needs of neighborhoods. Some means of education had to be devised wherever groups of people were found, or wherever a central school could accommodate scattered families within a convenient radius (and often an inconvenient one). Here the elements of a common school education were found. The school was ungraded. It took all who could come and gave each his quota in an adaptable program, from the A, B, C's up. The scholars were grouped according to advancement, and so might form one group for one study, and another for a second study. System was not yet. In this school the extent of the program, or rather the character of the program, depended on the teacher who could be procured and upon the needs of individuals. There was no regular curriculum. Hence these schools offered secondary opportunities as well as those of a more modest nature. For a part of the year they were regularly supplied with college men as teachers, who, in school or out, offered to ambitious pupils Latin, Greek, and the more advanced mathematics. This provided an elastic plan that in a way supplied secondary education in many communities. This was natural secondary education. It grew out of, or was attached to, the popular schools.[5] It was a great educational force in the community, possessed great vitality, and won peculiar affection. Its effects must not be underestimated.[6] They sank deep into the life of the people and live with peculiar force in secondary education to-day. They tided the country

[5] Other secondary schools were, so to speak, autochthonic. They did not represent a growth from below. They began in the early history of civilization as schools for adolescents, before primary schools existed. After schools came to be graded, they were naturally classed as secondary schools. See early chapters for a fuller discussion of this feature.

[6] E.g., the author's native town, a very small country place, some twelve miles from Cambridge, has practically never been without its representatives in Harvard, a commentary on its educational spirit fos-

over to more systematic secondary instruction, better adapted to the needs of a growing people.

The academy.— But there was needed something more than this, after all, rather indefinite means of secondary education. There was a call for something more specialized and extended, capable of supplying a larger degree of culture,— in the main a finishing school, in the best sense, for those whose means and ambitions combined to lead them beyond the district school. It came, an attractive and notable secondary school, establishing itself irregularly as endowments and opportunities offered in various sections. It drew pupils from the school locality and also from remote places, so that it had to become a home as well as a school. Its tributary territory was wide or narrow according to its reputation, which rose and fell according to the ability of its masters. Some of our most noted teachers made their reputations there. It began about the middle of the eighteenth century and naturally was influenced by the new movements in education that have been traced in Chapter XVIII. This school was the *Academy*. It multiplied rapidly under the encouragement of the state, which gave it a legal status and aided it with endowments of land and money. By 1850 there were some 6,000 academies scattered through the different states. Their fortunes and their age limits naturally varied. Their lives were sometimes short. They declined rapidly in number after the middle of the century.

Origin of the academy.— The academy was a natural product of the country. It is true that the name and form came originally from abroad. As it grew however and adapted itself to the lives of the people it was thoroughly American. More than this, the pressing influences that have been noted were calculated to issue in some such form as this without any importation. The imitation would seem therefore to be merely external. The personality of the people so changed the institution that it was practically an indigenous school. It served a

tered, if not developed, by the conditions described, though in this case the grammar school legacy mentioned above was a factor in the result. Similar results, at least notable ones, were found elsewhere,— rather generally, it is to be assumed.

great purpose and gave training and inspiration to the leaders of those days.

Curriculum.— The typical curriculum is illustrated by that offered by the trustees of Phillips Andover Academy, one of the most famous schools that resulted from the academy movement, and one of the very few that have persisted to this day. In 1778 the purpose was stated in this way:

"To be a public free school or academy for the purpose of instructing youth not only in the English and Latin grammar, writing, arithmetic, and those sciences which are commonly taught, but more especially to learn them the great and real business of living. There may also be added music, art of speaking, practical geometry, logic, history, and such other liberal arts and sciences or languages as opportunity or ability may hereafter admit and as trustees may direct." [7]

An interesting example.— The establishment of an academy in the author's native town, a New England village of a thousand inhabitants or less at the time, furnishes some interesting points as to the development of the academy idea, and at the same time gives some hints as to organization and method at that time.[8] In 1792, through the work of an association called the "Proprietors of the Liberal School of Lincoln," an academy was decided upon. Within a year a building was provided and the academy began its work, offering as its curriculum astronomy, higher mathematics, rhetoric, Latin, Greek, and principles of religion and morality. Teachers prepared the text-books and they were transcribed by pupils. Here Samuel Hoar, Professor John Farrar, and the Rev. Cyrus Pierce, the first principal of the first normal school in the United States, were prepared for admission to Harvard. The school continued for about fifteen years. The building was then sold to the town and used for a district school till 1872, when it was relegated to humbler uses.

From Chancellor Brown's book, *The Making of our Middle Schools,* we may judge that the following list of secondary studies represented the limits of curricula, the different schools drawing from it as suited their purpose and the conditions of

[7] From Brown's Making of our Middle Schools.
[8] See History of Middlesex Co., Mass.

their work: — religious instruction, Latin and Greek, English, mathematics (on which strong emphasis was laid), surveying, navigation, natural philosophy (chiefly astronomy), geography, history, rhetoric, logic, moral philosophy.

Method.— As these academies showed the influence of the world-movement in curriculum,[9] so they probably did in method. Evidently more of the concrete and objective and experimental was found there. As they were coming nearer to life, so they were coming, in their modes, nearer to the processes of life.[10]

We must not, however, suppose that the policy and aims of the academy were uniform. Their early purpose has been given with sufficient definiteness. Their later purpose was not so simple.

Change in relations of the academy.— The old grammar school, as we have seen, was peculiarly related to the college; it was the college's preparatory and feeding school. As the academy came in and the grammar school sank from notice, or, in large areas, became extinct, the academy naturally came into close relations with the college and became a feeder. Finally it became primarily a fitting school, and its place as a general school for the people was taken by another institution.

The academy differentiated its work in obedience to the general movements of the century, now being genuinely classical, now classical-scientific, but never becoming so narrowly classical as some of the older schools. Its history forbade that. As preparation for higher schools besides the typical college became necessary through the growth and culturizing of new interests, it carried differentiation still further. Today in its best state it is merely a private high school,[11] having

[9] See Chapter XVIII.

[10] One touch of method is given in the illustration above.

[11] Both of the forms of secondary education that have been discussed, the District School and the Academy, owed allegiance to, and were influenced and promoted by, both the state and private individuals. The academy often owed allegiance also to the church. The district school had often had a minister as a leading, or even the leading, spirit on its committee of supervision. Each was, in one degree or another, a part of a public school system. They took the place of the old grammar school, though the church influence was smaller in them than in the older institution.

a broad program of studies out of which have crystallized various curricula.

A new school,— an indigenous school.— The latest addition to our secondary school agencies has marks of greater permanence than any of its predecessors enjoyed, for its roots are in the soil. Whatever may be said of the academy, the new school has grown out of the life of the people, and that too since they have become acclimated and have developed a national tone. It has, therefore, come nearer the heart of the people than any organized educational agency except the primary school. There was needed a school that should represent the genius of the people, embody their ideals, and be so responsive to their needs, even their moods, that it would never become fossilized in matter or method, nor so conservative and slow-moving that it would not keep pace, within reasonable limits, with progress in educational ideas and in intellectual and industrial life.

The High School — General characteristics.— The High School met these conditions. It began in 1821, in Boston. The manner of its coming was in itself significant. In the first place, it was an extension upward from the elementary education of the period. It was thus an outgrowth of the popular education that was so auspiciously started by the laws of 1642 and 1647. In the second place, it was a local school confined to narrow limits of territory. In the third place it was introduced to meet special needs. The secondary schools in the vicinity of the first high school, the former Latin grammar schools, were evidently not giving adequate preparation for the new professions and occupations that were rising. The aims of the High School, as formulated by its promoters, show this. It was established to "qualify by mental discipline to fill usefully and respectably public and private stations for which the facilities at hand do not qualify." In the fourth place its initial curriculum marked it as a school meeting new conditions and responding to the influences of the times. It offered a three-year curriculum at first, with the following studies: — English, history (ancient, modern, American), geography, arithmetic, algebra, geometry, plane trigonometry and applications (navigation, surveying, etc.), natural, moral,

and political philosophy, and astronomy. In the fifth place, it was a public school, a product of the idea that the state is responsible for popular education, because it must, in obedience to the laws of self preservation and advancement, see to it that its life and ideals are perpetuated. The trend in this direction had long been seen and felt. We can trace it back to the sixteenth century, as already shown, but this applied to elementary education. For the state to undertake popular secondary education and make it free to all was a thought of slower growth. This was the beginning of a movement that has had a much more extended development here than abroad.[12]

This first high school was called the English Classical School, but almost immediately it came to be known as the English High School, and has kept the name.

Growth of the high school idea.— The high school idea worked slowly. Communities had to persuade themselves that the idea was a wise one, and had to accustom themselves to it. A quarter of a century elapsed before many schools were established. But the thought of public control was deepening and had immense vitality. The Dartmouth College case showed conclusively how much voice the public had in endowed institutions that hitherto had supplied secondary education. From 1850 on high schools multiplied rapidly and gave very definite promise of making secondary education universal.[13]

Relations to the college.— Other secondary schools had been so closely connected with the college that it was quite natural that the new school also should take on college relations, and that the academies, the mainstay and feeders of higher education, should decline.[14] Early high schools therefore became preparatory schools, and, in consonance with the classical revival of the New Humanism, which was a world force, they made the classics the central feature of their curricula.

[12] It is, of course, true that other nations have gone to great lengths in establishing and promoting secondary education, but it is given to the people conditionally. It carries with it tuition fees, and so limits its application.

[13] Some states were especially forward and enterprising in this movement. Some were as notably backward.

[14] Due in part to the rise of the new school.

Broadening of the curriculum.— But the reál idea and kindred ideas were rousing for a final effort to establish themselves firmly and influentially in the schools. In the second half of the century, when free secondary education was spreading at a more rapid pace, they completely changed the character of the high school curriculum. This change was seen in programs of the sixties,[15] though of course not in its full force. It was necessary to soften and overcome the prejudice of classical circles against the new, in order to give these studies due importance in the program. It was necessary also to train teachers and to develop the machinery and method for making the studies duly effective. It took some time, therefore, to establish the new subjects as essentials for every educated person both from the point of view of information and from that of training and culture.[15] To a hasty observer results might easily have appeared superficial, in the early days. For instance, it was the era of the 14-weeks text-book in science. But in reality there was deep significance in it all. Eventually the new made its place secure and took precedence over the old, as will be seen by comparing present-day programs with older ones.[16]

Differentiation in the high school.— In the last decades of the century a process of differentiation began in our high schools in two different directions. First, life had become more specialized and new professions and industries had

[15] The New Haven High School in 1867 offered a 3-year curriculum in which were taught English, Latin, Greek, French, German, arithmetic, algebra, geometry, trigonometry, book-keeping, physical geography, physiology (lectures), natural philosophy, astronomy, natural history, household science, rhetoric, history (ancient, modern, American), geography, civics.

The Cincinnati high school in a 4-year curriculum offered English, German, French, Latin, Greek, elementary and advanced algebra, geometry, plane trigonometry, surveying, history (outlines), anatomy and physiology, natural philosophy and astronomy, chemistry, botany, geology, mental and moral science, civics, drawing, pedagogics. The latter subject indicates a new office for the high school, that of training teachers. The idea has had some currency. As trained teachers were too few to supply all schools and many high school graduates entered immediately upon the work of teaching, a real service was rendered through this plan, where the high school normal work was anything more than perfunctory.

[16] See appendix of Chapter XXIII for recent programs.

sprung up. Wider preparation was therefore required for more lines of work than formerly,— for commerce, for technical pursuits, for industrial life, for education. A new preparation was essential for older professions and occupations. More attention had to be given to individual needs and preferences. From all these circumstances the high schools were obliged to offer, in place of a single uniform curriculum, several parallel curricula suited to meet the entrance requirements of professional schools, or adapted to more immediate ends. The larger schools by allowing the elective principle to enter in one degree or another were able to meet group needs and individual needs in still greater detail.[17]

Second, differentiation came not merely in studies and curricula, but in schools, in response to modifications in educational ideals and changes in conditions of life,— the former dependent on the latter.

Manual training departments.— This differentiation had to do, first, with altered circumstances as to manual work and with the transformation of ideas and ideals here, seen in the introduction of manual training into the curriculum. The causes and conditions that led to the change are well known. This is not the place to follow in detail the evolution of special subjects like this. A volume could easily be given to it. The change from a general and inclusive type of life to one that is specialized and exclusive, and the growth of city populations, were primarily responsible for the new thought as to manual work, so far as the introduction of manual training into schools was concerned. The training once supplied naturally by the multum-in-parvo country or village life must now be supplied artificially. As natural and spontaneous education declines, artificial education advances; otherwise efficiency must be lowered. The compensation in this case is not voluntary, but forced. Again, the development of technical pursuits and

[17] In fact graduation from a high school generally came to be based on completing so many units of work, though under certain limitations of choice that practically gave a uniform core of subjects as a basis. By general opinion this core consisted of quotas of language and literature, science, history, and mathematics, in addition to music, drawing, and physical training. The prescription therefore was not specific but general, allowing considerable opportunity for choice.

professions, due to conditions described in previous chapters, emphasized the need of skilled manual work, and this also fostered the idea of manual training. The first emphasis, however, was on *manual*. Then, out of the heat of discussion and the conflict attending so striking a movement to modernize the curriculum,[18] came the thought of an educational purpose. The study of physiological psychology showed the relation of manual training to brain culture,— that such work brings into function brain tracts otherwise neglected.[19] Associational psychology suggested and enforced the idea that, by correlating manual training with other subjects, knowledge is related and clarified, thus giving added interest in, and insight into, the other branches of the curriculum. The incidence of thought was now on *training;* this idea took precedence over the first. Finally came the *culture* idea. Manual training thus came to concern itself with form as well as matter, with meaning as well as substance. The subject embraces all work of hand and eye combined, bringing into action, and thus contributing to the development of, all mental powers, in one degree or another. It involves, in its widest application, the work of several schools,— the trade school, the school of mechanic arts, and the school of fine arts,— as well as the varied manual work that has come into the common school curriculum. An art student, whether concerned with fine arts or mechanic arts, becomes a stronger and finer student and a finer workman, if he knows the history of his art and the correlations of his art, literary, esthetic, and scientific, i. e., knows more than the bare technique of his calling. A manual training curriculum might therefore easily be broadened and become a culture curriculum of the highest type.

Grading of manual training.— Now as history or science or geography may be and must be graded to suit all ages and thus fulfil their place and relations in schools of all grades, so manual training has an elementary school side and a secondary school side, and it follows the student yet beyond. Particu-

[18] The feelings of would-be educators in this instance are comparable with those which came on the invasion of the fifteenth century curriculum by new subjects. See Chapter XIV.

[19] Just as physical culture has been enhanced by the same study.

larly does manual training have great possibilities in the secondary school, if the conditions which have been mentioned are to be fulfilled there. It appeals to adolescents, for they love art and history and great ideas; they are full of activity and like constructive work, whether intellectual or physical.

A Manual Training High School.— A belief that such subjects keep up interest in school work and tempt pupils to prolong their education, added to a confidence in the training-value and practical value of the new subject, led to the founding not of a new school, but a new type of the new school we are considering, the *manual training high school,* which has had a striking growth in some of our large cities. The idea was too large to be worked out adequately as an attachment of existing high schools. It required a separate school to give a typical development. Manual training could, of course, be made a branch of the regular high school work, and this was frequently done with beneficial results. In fact, if the subject is of any value, it has a necessary relation to all schools, to give a proper outlook on life and a kind of practical training that is much needed. In addition it enhances the value of other studies. But, with all this, the separate school had a place, to show the full meaning and value of the subject and to give a training needed by certain classes in our highly differentiated communities. In effect it brought into school life a new culture curriculum, of great possibilities or very narrow possibilities, according to the spirit in which it was carried out. It was a peculiarly fitting curriculum for a high school, which is a finishing school for so many. There was needed an opportunity for those who chose mechanical pursuits to equip themselves for their work, not by learning their trades or professions in the sense of becoming technically proficient in them, for that must come elsewhere, but by cultivating them. This cultivating was to come not through a narrow curriculum, but by one broad enough to give a larger culture that would lead men to work more intelligently, more appreciatively, more interestedly, and more accurately, and give larger play to their minds in many directions.[20] A curriculum or two will give

[20] It is unfortunate that culture has in the minds of many come to signify something that is the antithesis of the practical. Culture in

some idea of what was accomplished in the new directions, how far the manual training high school ran parallel with the older types of high school, and what remained to be done to give it more purpose and solidarity.[21]

High School of Commerce — Its philosophy.— Like the arts commercial pursuits also came to demand specialized training. In early days commerce was simple, unorganized, empirical, personal; ideals were narrow, crude, individual; competition was general, long-ranged, inarticulate, shrewd. Any man with ordinary gifts and good management could succeed. But now business began to be organized, scientific, impersonal; ideals were becoming broader, though still narrow and one-sided, polished, though not refined, corporate; competition was developing into something minutely particular, close-ranged, articulate, keen, cruel, predatory. Commerce therefore demanded more than a general training. It demanded also more than a technical business curriculum, which deals with little more than the forms and mechanics of business.

Value of technical training for business ideals.— But there was something more important than all this. Trade had become an institution. To serve it successfully, to turn it from doubtful and unworthy tendencies that were coming in, and toward a realization of its best, one must know its characteristics, its departments, its laws and codes, its principles and practice. No one could know it all in detail, but he must, in addition to a general knowledge, familiarize himself minutely with his department. He must know sources and resources, routes hither and yon, formulæ of production, economies of handling, possibilities of by-products, means of improvement, laws of growth, possibilities of invention,— not that one could know it all intimately, but he must know it all in the large and be able to command it all, and see that it was forthcoming. Success might depend on any one of these things. A mill saved by some economy might turn the tide; a route better by a few

the true sense gives power to see, comprehend, and appreciate relations, and this is the essence of practicality. Culture is in no way synonymous with knowledge.

[21] See Appendix to Chapter XXIII.

Here again we must note the rise of vocational studies and the prospect of more specialized vocational high schools. See also Chapter XIX.

miles, or quicker by a few hours, might be a pivotal matter. A scientific study of economics might obviate an advance in freight rates. All this meant that commerce demanded experts who knew not mere forms, but meanings and relations, the inner springs and principles of motion. A broad culture curriculum in commercial science,— commercial chemistry, physics, history, geography, psychology, law,— was necessary to train the man of business. There was thus room for both a secondary and a tertiary curriculum. So came high schools of commerce to join the specialized schools. They had small development, as yet, but found a place in the largest centers.[22]

Social reasons for commercial education.— There are, however, other reasons why commerce should demand a broad culture as a preparation for serving it. If trade or commerce is an institution, as it ought to be, it must develop the characteristics of an institution, the chief of which is service. Service is fundamental in all institutions and other characteristics grow out of it. For that they are born; by that they grow. Commerce has primarily no rights,— at any rate no monopolistic right with natural resources; no institution or individual has; it has a steward-right or rent-right only. Its typical function is as an intermediary between sources and public, and it has a right to legitimate compensation and rewards for that service, commensurate with its ability and efforts, but correlative with the compensation and rewards accorded other institutions, no more. Contrary ideas are based on feudal civilization.

Now it is this side of commercial life that a specialized study of business is calculated to develop. There is scope here for adolescent inspiration. There is room for broad secondary courses and curricula and for broader and more detailed university courses.

Rise of the Agricultural High School.— One more line of specialization calls for notice. It has to do with the fundamental profession of all,— agriculture. In the early stages of development in our country crude methods and a natural science of agriculture brought sufficient returns and equalized opportunities and fortunes in a democracy of agriculturists.

[22] See Appendix of Chapter XXIII for the curriculum of a typical commercial high school.

Land was abundant and stretched limitlessly beyond current needs. Overflow was provided for without intensifying cultivation. But conditions changed. Population pressed upon natural agricultural resources, though not so seriously as to rule out entirely the old state of agriculture. Finally compensation in the net returns for expenditure of capital and effort in agriculture was not sufficient, when compared with inducements in other directions, to insure an adequate development of natural agricultural resources. It was not sufficient to "keep up the stock," to say nothing of advance. It was thus necessary that agricultural life should hold out larger inducements, larger commercial opportunities. With it all, there was an urgent call for surplus products to supply other populations that pressed too closely on their own sources of supply. These were technical reasons for giving more attention to agricultural interests. Interwoven with them were reasons suggested by the palpable decline in the quality of country life that had its ground in the same general conditions that have been described. Agriculture had fallen from its once commanding position and had come to be looked upon as one of the lower and more uncultured vocations. Education and talent had sought other fields, and agriculture had come to be regarded as the haven of the common people, who were thus in a way isolated by certain very artificial distinctions. A kind of caste had grown up.

A change in the status of agriculture.— This was not only wrong, but dangerous for the future of agriculture. A change was needed. The lack of motif must be remedied. The status and personnel of country life must be improved. The profession of agriculture must again reach its commanding position as the leading vocation, attractive and stimulating to the highest talent, fostered by a very definite and insistent education and training, and distinguished for culture. The change began, partly through the influences mentioned above. Agriculture was coming into its own.

A science of agriculture.— Every human interest, of itself, inevitably becomes an object of exploration and study, first by the few, then by the many. It accumulates a body of experience which must be handed on. As it makes itself a

matter of serious study, it discloses its laws and becomes organized. It then becomes scientific and so more than ever an object of devotion for students. All this and something more awakened a new attitude toward agriculture. Both justice and sentiment on the part of thoughtful observers and students of national opportunities led to the adoption of means for encouraging and promoting such a wide-spread and important interest. What means surer than education? Out of such conditions naturally came a science of agriculture with its incentives to study. Courses in agriculture were established. They grew; they made more courses necessary; they claimed a place in the common schools; they made a new high school with a new curriculum.

Earliest form of agricultural schools.— The earliest form of agricultural education under public control was the state agricultural college, which from more than one point of view might be rated as a secondary school. It began about 1860 and was materially aided by the general government through the "Morrill Act" of 1862. It was still further advanced by appropriations provided by the "Hatch Act," of 1887, which encouraged experiments and set free inventive genius of a new kind. As a rule, preparation for these schools was left to the regular high and elementary schools.[23] The high schools, with their new studies were able to respond in a measure to the demands. But agricultural studies must be graded if they are to have a sound development. An agricultural secondary school was the natural concomitant of the agricultural college. Here was the vantage ground for the initiation of the work, for reasons stated before and needing no rehearsal here. In reality, the secondary school did come first, for the college, as just indicated, was probably to be classed with secondary education. As the college grew its secondary functions naturally fell to another school. But the agricultural high school was more especially needed to give a culture course to the majority of intending agriculturists who go no further in school life. It began its mission in the West near the end of the century.

[23] It need not be surprising that elementary schools are mentioned here, for in some instances admission requirements had to be low to meet the new conditons.

It has the same claim for recognition as the manual training high school or the commercial high school, and it is as logical a development as they.

Country life winning.— Inventions that have improved means of communication and given better opportunities for culture are fast doing away with country isolation,— bringing city and country together. Country life is winning back its old charm. Scientific agriculture, with its opportunities for invention and for creating and propagating new species, and with its incitement to new records, gives still further attractiveness to that life and makes it a worthier object of high talent. This is a result in part of the movement that has given the agricultural high school. May it not be in part a cause of that school? [24]

Method.— In these various forms of the High School, method in general followed the trend of the period described in the last chapter. Method determines the value of the curriculum. It is the inner spirit of the educational process. The High School, being a new institution and hence less hampered by tradition than older secondary schools, had a fairer opportunity than the latter for initiative in method. That it did not seem to respond to the opportunity is perhaps a sign of its newness. It was so occupied with getting its new forms started that for a time at least it gave less thought to method and displayed less care in the preparation of teachers than older secondary schools, especially the secondary schools on the Continent of Europe. But beneath all this was the fundamental conservatism of secondary education that is apparent from the facts embodied in the last chapters. During the last years of the period, however, method began to attract more earnest care and thought and promised a genuine renaissance.

Summary.— The evolution of secondary education in the United States was a rapid and striking one. As we follow its course we find five stages: — 1. The Grammar School period. 2. The District School with its secondary school attachments. 3. The Academy period. 4. The High School period. 5. The

[24] A typical curriculum of this school is furnished by an agricultural high school in a typical agricultural state. See Appendix to Chapter XXIII.

period of differentiated high schools and high school curricula. The spontaneity and unconventionality of its growth, the freedom with which it adapted itself to different needs and conditions, its purpose to serve the public, and its apparent lack of system and internal organization are perhaps the most conspicuous characteristics of the American secondary school up to the end of the nineteenth century.

XXII

A REVIEW OF THE EVOLUTION OF SECONDARY EDUCATION FROM DIFFERENT VIEW-POINTS

It will be of interest here to sum up and classify some of the main facts as to secondary education that we have discovered as we have followed its development through various epochs, and to make some generalizations that will form a perspective and be of value in a discussion of secondary school interests.

Grading of education.— First then, education, through the influences which have been described in the different chapters, has become significantly differentiated into 1, primary education; 2, secondary education; 3, higher education, which have met us everywhere since the Greek people developed a graded education.

Aims, with examples.— Again, the aims of education have been rather clearly differentiated and embodied in several school types: — 1. The cultural, as seen in the later Greek schools and their Roman counterparts, in a few great schools of the early Christian centuries, in the universities, and their feeders inside and outside, the typical classical schools of the Renaissance and later times, and finally in the modern Gymnasium of Germany, the Lycée of France, the Great Public School of Great Britain, and the classical High School of America. 2. The practical, vocational, or industrial, represented by the more characteristic sophist schools, by a certain type of the Roman rhetorical school, by the parish schools in which the early Church taught its followers the rudiments of agriculture with other rudiments, in a somewhat different way and on a different plane by the arithmetic schools of the guilds and the modernized English schools of the fifteenth century [1] that were forerunners of the modern commercial school, and, in the last

[1] It will be remembered that these schools introduced commercial subjects that scandalized the Latinists.

decades, by industrial and trade secondary schools in different countries. 3. The technical, illustrated by the various technical schools of Europe and America. 4. The professional, best exemplified by the grammar and rhetorical schools of old Greece and Rome that trained the orator, by the early university faculties of law and theology that trained members of the clerical profession for their broad and commanding places in society, by the same and additional faculties of the modern university, and by specialized professional schools of to-day.

The cultural type most prominent.— Till the eighteenth century the industrial type was not largely represented in the schools. Industrial life was as yet simple and unorganized, and rarely felt the need of specific preparation through organized education. But, as we have just seen, both primary and secondary education, secondary more than primary, had entered the field of vocational education with considerable effect.[2] On the other hand, schools of the cultural type were prominent and were highly organized and very effective.

The reál movement.— From the eighteenth century on the secondary school very logically, but very gradually, developed forms and programs that had been objects of less concern before. In the struggle for a greater freedom the first notable epoch is that which culminated in the reál-schule movement of the early eighteenth century, which quickly fell away before a revived cultural movement represented by the New Humanism, less formal than the old humanism, but scarcely less abstract. The new movement, however, was not dead. It reappeared in stronger form and under more favorable circumstances in the latter half of the nineteenth century. Then the line of cleavage became definite and decisive. The two ideas, the cultural and practical, were embodied in two distinct series of schools, or in separate departments in the same school.

Cleavage between classical and scientific aims.— But the one, the practical, always tended toward the cultural, for all studies eventually become culturized, if they are true to their own implications; the other, the cultural, pari passu, was as constantly forcing itself, or being forced, to become more con-

[2] It may be questioned whether, for the times, as much attention was not given to vocational training as at present.

crete and practical. During the last fifty years the process has been greatly accelerated and differentiation into several practical-cultural types has been pronounced. Another and higher humanism has appeared.

Ideals.— During the period under review the secondary school has had a wonderful history. From epoch to epoch we have noted new ideas, methods, means and ends, but the school has never lost its identity. Plans and ideals, however, have changed through natural growth and have been modified by artificial pressure. Ideals are fundamental. Plans are subservient to them. Ideals are especially interesting when viewed in historical succession. The next step, therefore, will be to show this succession by arranging the ideals in a series with brief comments as to their significance. We have then:

1. The **tribal ideal,** under which the tribe (or later, when the larger political unit was developed, the state), was everything and the individual nothing. Progress depended upon the will of the whole body. There was no individual initiative, no opportunity for individuals to shoot ahead by the inspiration of genius and lead the way. The chances for advance were therefore as one to a thousand. It was a static ideal. Here rote-learning had its birth.

2. The **civic ideal,** under which the state regulated education for its own well-being, but gave the individual large scope.

3. The **individual ideal** that made individual development the central motive, thus creating a dynamic state of society. In its extreme form it made the individual everything and the state nothing. Hence the state fell.

The last two ideals were conspicuous in the history of both the Greek and the Roman state.

4. The **institutional ideal,** in which an institution was substituted for state influence. In general it was the counterpart of 1; in a special and very limited application it was the counterpart of 2.

5. A **psychologic ideal,** under which men devoted themselves most intensively to the development of mental acumen by a single subject. It served as a transition from 4 to 6.

6. The **humanistic ideal,** which began in the Renaissance period, but flourished more typically in the new humanistic

period that followed. It involved strict training in the elements of great subjects that represented the essence of past culture and art; it was calculated to set the spirit free for the enjoyment of the best of past acquisition, and beyond this, to stimulate creative genius. At its best it was a genuine incentive to thought and enterprise in a rich, though somewhat circumscribed field,— a great field however for the times. At its lowest it left one bound in the bare forms, non-spiritualized. Altogether it made a period of great spontaneity and achievement, and served well as a preparation for exploration and creation in an unlimited field. Perhaps its motif may be best expressed by the word *appreciation,*— appreciation of the best in literature and art as a lift in the development of power. It was at heart aristocratic, and thus found its most characteristic function in class education.

7. **A new civic and individual ideal,** in which two inspirational thoughts coalesced, an ideal that was for modern times, with their more substantial and persistent spirit, the correlate of 2 and 3. The more steadying, pervasive, and enduring force of Christianity gave it a larger and deeper meaning and a new outlook and purpose. The ideal, faithfully applied, brings the individual manifold power and makes him an effective user of his power and a useful and dependable citizen. The ideal halved, as has sometimes been true, leads to extreme individualism, from which the world has suffered much. But, taken in its completeness and in its genuine form, this ideal gives the best conditions for progress, a perfect balance of individual and community interests. It secures individual initiative, supports and strengthens the state organization that makes acquisition firm and gives it value, and develops the social spirit that is the mainstay of society. At heart it is democratic.

8. **Formal discipline.**— In the course of this growth there has seemed to be an eighth ideal or partial ideal that held the field with others. It has given a certain thoroughness, exactness, and skill through rigid application and drill. Those who were not driven from the school, through repulsion for the process, gained a kind of greatness and power from " continuous association with great subjects," because they in some way caught the spirit from the matter, not the form, and felt the

stimulus and enthusiasm for achievement that came with it. This was perhaps in spite of the ideal rather than because of it. For the average pupil it gave partial results rather than full development, form rather than spirit. In reality it was only a branch or accessory of method, not an ideal, and yet it has often so occupied the forefront of attention that it has seemed the ideal itself, rather than a means.

These ideals have affected the secondary school more than any other part of school life, because it is the basal and central school, and thus has been the object of the most intensive educational effort. In application most of the ideals have missed the peculiar element that adapts them to pupils of the secondary age. This has been peculiarly unfortunate, because adolescence is especially a period of ideals and so is open to the influence of informing ideas more than any other period.

Precedence of the secondary school in development and in civic functions.— But more interesting than this progression of ideals is another matter that has been prominent in this historical study, the relative position and influence of the secondary school in the community. The secondary school was the first school to be developed. Primitive peoples had a definite organization for accomplishing a definite purpose for the age that corresponds to our secondary school age. It was the only organized form of education at that time, and was therefore primary, not secondary. Up to this period of life children could gain in a natural way, without any special organization, what information and training were necessary. But the tribesmen saw in early adolescence certain characteristics that made it the period of definite instruction in an organized school. For the first time the child could see meanings and relations in more than an external way. For the first time he could be inspired with devotion that would lead him to defend and protect tribal ideals and conserve tribal life, even to the point of sacrifice. He now had the physique and the mental power to become a safe factor in tribal interests. Now for the first time he could appreciate and preserve tribal secrets, for he had reached the secretive age. Hence the best of the tribal inheritances could be explained, or exhibited, and given over to him as surety. The adolescent period is the time for showing meanings, inspir-

ing, instructing, relating. The great purpose of education in this period is to give the adolescent the choicest treasures of the experience of the race and to initiate him into citizenship. Head men of the tribe therefore utilized it for inducting into great tribal ideas, for developing great tribal interests. The early tribes felt its opportuneness in a general way, felt it intuitively not as a result of specific reasoning. They saw that this secondary period meant more to the tribe than any other, and that education now was peculiarly essential for tribal existence. The following period, later adolescence, was the one for giving technique and firm mastery, the practice that made the expert tribal citizen, the judgment and rude philosophy that made the tried adviser and manager. This came from participation in tribal life. The boy was now a part of the tribal organization. This was his higher school.

Higher education in early ages.— The higher education of the ancients attained its greatest development in the latter part of the early Greek period described in Chapter IV.[3] It there carried out precisely the spirit of primitive education, only the spirit was colored by the peculiar characteristics of Greek life. It was preceded, as in primitive education, by secondary instruction in matters sacred to the Greek people.

Coming of the elementary school.— The first change which affected this general plan of education was the introduction of written language, followed by the rapid growth of literature. It therefore became necessary to master the symbols of this written language. This was an initial and elementary process and fell naturally and logically to children. It was also a formal process and suggested organized educational forces to

[3] Higher education since then has developed special school forms, because society has become specialized and divided. The solidarity of the tribe gave place to the looser organization of the nation. It became necessary therefore, when the boy, from his place in society, could no longer gain the training required to fit him for his duties, to establish special schools for the purpose. Again participation in community life came to be only partial. Hence special civic training in school became necessary. Later centuries so magnified the special training and minimized the general concrete civic training that a gap was finally left in education. Lately the public conscience has been somewhat aroused, and attempts of various sorts have been made to correlate school with life.

compass it. Previously the school of nature and community life sufficed to meet the educational needs of the child. Now the need of another special school-form was felt. Inevitably the formal elementary school arose.

Changes in the secondary school due to the coming of the elementary school.— But one must be able also to master the spirit of written language,— to feel, to appreciate, and to express feelingly and appreciatively. This attitude toward, and this kind of contact with, literature belongs to adolescence. Then for the first time the real appreciation of literature begins; feelings grow strong; love of eloquence develops. The formal part of language work must be over, so that youth may come to its real work.[4] The secondary school thus just as naturally took up this more advanced study of language and literature as the lower school busied itself with symbols, the early stage of reading, and memory gems.

Development of linguistic study — Rise of the University. — We may look at it in another way. As society grew more complex the qualifications for serving it became more exacting. The value of language power for moving men and winning place and distinction became apparent. The natural education that in early Greece and Rome, as well as among primitive peoples, was sufficient for preparing men to serve the state could no longer suffice. As the result of the two lines of influence new and higher institutions arose specially calculated to give the needed training both general and technical, the

[4] Modern psychology added another reason for assigning this work to the elementary school when it discovered that the years just before puberty are best for form work.

The mastery of the symbols of language was at first the only necessary function of the elementary school, though the elements of number, an entirely minor matter, came into the elementary school very early, perhaps at the outset. (We should, however, here note again the typical Greek elementary curriculum.) Community life gave the rest, as it always had done. The elementary school became a very serious matter. Hours were long,— from daylight to dark. The child was literally confined in the elementary school. Hence the natural mastery of the facts of nature and practical life, which tribal life had supplied, failed. To make good this serious loss various attempts were made, in succeeding centuries, to bring the child back to nature or nature back to the child. Da Feltre, Rousseau, Comenius, Pestalozzi, and a long line of others took up the case of the child and rescued school life from the bareness and abstractness that had so long characterized it.

secondary school to give the specific language foundation, the school of oratory to supply the technical training. Thus two new phases of language study showed themselves, one typified by the study of grammar and composition, the other, to which the first led, by the study of rhetoric and oratory. These are the changes in education that were going on in the Greek period discussed in Chapter V. The logical outcome, however, is seen more clearly in the Roman schools. The first of the new phases of language study formalized the secondary school and began the tradition of formal discipline; the second was higher or university work as organized by the classical nations.

New relations of the secondary school and their effects.— A great change had thus come to the secondary school. It was wedged in between two growing schools. The elementary school prepared the way for it and prescribed for it on the one side; the higher school prescribed and influenced on the other. The secondary master envied the teacher of rhetoric and trenched upon his province. The elementary school, with its prescriptions, and the pressure of a more complex society tended to make the secondary school an advanced school of letters with the intensive linguistic and rhetorical courses that have been described. The secondary school was thus beginning to lose its identity and to give up or minimize some of its most fundamental characteristics, though they were entirely consistent with its new position. It suffered a tremendous loss, realization of which finally set in motion a whole series of influences pressing for reform in secondary education.

The mediæval university and its effect on the secondary school.— But the university of the later mediæval centuries was the crowning development in school forms. Its rise was far more momentous in the history of education than the rise of universities in ancient Greece. Its origin was different. Its aims were higher, its implications were greater, its influence was farther reaching than anything that had gone before. With the development of this later university came another episode in the history of the secondary school. It was not a distinctly new episode, but it was fraught with longer and larger consequences.

The vassalage of the secondary school.— With the partial eclipse of education in the first millennium of the Christian era the newly developed university, finding difficulty in securing students who were prepared to take up its courses, took the natural alternative of preparing them itself. It thus had its own secondary schools within its own precincts, as seen in an earlier chapter. The university also profoundly influenced secondary schools outside, so that they felt a new stimulus and raised themselves to a higher standard. Henceforth, by whatever name called, secondary schools were regarded as, in an important sense, existing for the university. They were preparatory schools and found their ends outside themselves. The secondary school thus came into the ownership of another, and a long vassalage began. The university at once proceeded to make certain requirements of the secondary school for its own ends.

A change in the center of interest in education.— After a time the university gave over to the secondary school some of its own earlier tasks and imposed its methods. Added to this external pressure was the ambition of the secondary school to get for itself some of the attractive things of university education and university life. Secondary teachers trained in the university liked the more advanced work and method from which they had just come, and secondary pupils were fond of imitating what they could not yet appreciate.[5] As a result of all, the secondary school got beyond its depth. It was lumbered with much that was totally beyond its power and unsuited to its characteristics. The center of interest had thus shifted. Originally it was the adolescent school, and everything pointed toward it, led up to it, or radiated from it. Now it was the university, and everything took its emphasis from it.

This change in the nature of the secondary school was an artificial one, due to hasty organization suggested by the emergency of the moment. It was not natural, nor studied, nor scientific. Nevertheless it impressed itself deeply on the school organism. For six hundred years these relations of the two

[5] We may recall here what Quintilian said as to fondness of grammar masters for appropriating part of the work of the rhetorical schools. See Chapter IX.

schools continued, becoming stronger with time and growth.

The first break in the policy.— The reál movement of the eighteenth century first broke this continuity. It started the development of a series of schools not bound to the university, though still keeping much of the old form and method. The establishment of the first high school in America early the next century gave secondary education another opportunity for initiative, and the outlook for a secondary school closely related to the people was bright. But almost immediately the university adopted the new school and made it one of the most intense and exacting preparatory schools of all. There has therefore been little change in the relation of secondary and higher education till within the last decades. The eighteenth century reál movement was significant only in making a cleavage in secondary education, rather than in modifying the relations of existing schools.[6] This modification was left for the late years of the nineteenth century and for the early twentieth century. During these years school agencies, working not so much for independent as for adaptable secondary education, have succeeded in modifying and reforming university-high school relations.[7] There have therefore been two movements, one to establish divergent series of schools and their higher correlates adapted to modern life, the other to readjust relations between secondary education and higher education in general.

Emancipation of the secondary school.— The real genius of educational development is to push out into higher forms,— into more complete equipment. The lower needs the inspiration of the higher. The higher needs the stimulus and help of the lower. In this movement the old university has undergone quite as much modification as the old secondary school. What has been taking place is really an emancipation of the secondary school that will leave it free to work out its real spirit for the interests of all, and will have the effect of making both the higher and the lower school face modern life in a cooperative way, so that each will use the other in supplying broader train-

[6] For most of the nineteenth century the secondary school continued practically as a preparatory school.

[7] See Chapter XIX, pp. 300 ff., and notes, and p. 309.

ing for the small but increasing number of those who can take an extended course of study. At the same time it will permit the high school to serve efficiently and appreciatively as a general training ground for that large body of adolescents that must confine its education to this school.

The movement to make the secondary school again the central institution, responsive to its own ideals and needs, is a most interesting phase of educational development. In studying and solving the problem of bringing this school to its own again we need to realize how deep are the roots of the problem, how long a history it has had.

Pressing problems of the secondary school.— This problem at first sight strikes the attention prominently and has been engaging thought in all parts of the world. But there are other secondary school problems more fundamental, because they grow out of the nature of the secondary pupil and the nature of the educational process,— problems of means and ends, of scope and organization, of curriculum, method, and administration. Their solution will materially affect the solution of the first and more external and superficial problem. Here it is particularly important to have a thorough knowledge of the history of secondary education and be able to follow its evolution, if we are to find the basal causes and reach definite and permanent results; for the problems,— their relations, their form, and their implications,— reach far back.

The future.— As the high school appears on the edge of the twentieth century we find not only large and worthy achievements standing to its credit, but certain very definite opportunities and needs calling it. In the case of any individual organism the body develops before the spirit. In the world organism present events make it only too manifest that the body has developed far beyond the spirit. Civilization at first pioneers and grasps at the most obvious necessities. In the development of high school education the same condition exists,— perhaps unnecessarily, but still no less definitely, and no less worthy of solicitude. It is wisdom to face the situation frankly. The external has outstripped the internal. More attention has been given to administration than to organization, to forms and curricula than to content and method, to teachers' knowledge

than to training for the teaching profession, to the *formal* demands of business and society, of college and technical school, than to *real appreciation* of the aims of the high school and its fuller relations to what is around and beyond it, to formal study than to a realization of adolescent qualities and adjustments, of what is after all the most vital preparation for all the ultimate purposes and stages of development that have been referred to. Just demands upon the high school therefore have often been lost sight of. Over against striking and most useful gains must be set the things still left to be done, and that with no disparagement of present accomplishments. The twentieth century thus has its work clearly marked out in these particulars and faces no inconsiderable task,— all the harder because it is not yet fully realized and appreciated by the general school public.

Three needs.— As the last century closed the high school was waiting confidently for three things,— 1, a reorganization of its curriculum-content, old and new; 2, changes in method based upon psychological principles; 3, a new spirit and aim and an organization consonant with them that would relate the school more closely to life and the ideas of democracy. The first had its beginning with the German realists and had been progressing very slowly since. It remained to eliminate the outworn, to adapt the new to the old more perfectly, and to adapt all more fully to new aims and ends. The second was initiated by Comenius and Pestalozzi, and was advanced by the German realists abroad and by Agassiz and his students and kindred spirits in this country. It touched the secondary school through the elementary school and the university, but it touched it rather lightly for a long time, for the secondary school has always been a laggard here and not an enterprising student of the psychology and pedagogy of adolescence. A method carefully differentiated from elementary school method, on the one hand, and from college method, on the other, was still to be developed. Too long it had been assumed that one general method applies to all cases, and that a special method for teaching a subject may be applied uniformly at any age of the pupil. The third reform was coming slowly through scientific study and through discussion from three view-points, first,

the history of the secondary school that furnishes the key to an understanding of the problem and its implications; second, the study of adolescence and of genetic psychology; and third, a closer investigation of the just relations of secondary education to the present organization of society.

Variety without unity.— This analysis brings out one side. To state the situation in another way and with special reference to our own country, it may be said that the last century was at once a transitional and an initial one. It had the characteristics natural to such a period. It would seem the counterpart of the early Christian era. Pressed by new ideas and new demands, distracted by the breaking up of old relations and the establishment of new ones, it had turned spasmodically now in this direction, now in that, as the circumstances of the moment suggested, and as a single ray of light directed. Conditions for settled forms did not exist. It was a time of experimenting. Orientation had been imperfect. Impulse unsupported by careful scientific judgment had been the guide. Education had felt a way rather than made a way. Many guiding facts had been lacking, and those present had been unorganized. Hence it had been a period of variety without unity in secondary education, of multiplicity of forms without the definite crystallization of types. The work had thus been external. It was for a new century to classify, to organize, to give scientific substance and unity, in place of shifting ideas and forms. This involved a new study of the whole of education as applied to current needs.

Another generalization — Progress in democratizing secondary education.— Still another generalization from a different point of view will be interesting, and it will help us to appreciate the condition at the end of the century and to interpret the signs of the coming epoch in secondary education. When the eighteenth century closed secondary education was essentially aristocratic, accessible only to certain classes, this partly because of national sentiment and consequent administrative restrictions, and partly because of prohibitive expense. Little change was made in the social relations of the secondary school till the nineteenth century was well-nigh spent. Its last decades saw great progress in accessibility of secondary education, in

urgency to take advantage of its larger opportunities and in readiness to respond to them.[8] It remained for the twentieth century to democratize it, to open it to all classes by abolishing administrative hindrances, and, by relieving or removing individual expense, to press its claims on all, till its full power is realized.

Reasons for extending secondary education.— Every individual is entitled to freedom. Education sets the individual free to develop his power to high possibilities. Individual power settled, collective power is assured. Education, rightly conceived and administered, is a selective process that determines and measures a nation's assets. To disclose a nation's real strength it must select from the many, not from the few. Even the poorest that goes through the process becomes a more effective agent by a margin sufficient to balance the cost of the process. Certain censors, by the fiat of individual judgment based on partial data and on aristocratic notions, would restrict the ministries of higher forms of education to certain groups that show promise in earlier stages of education. This is a dangerous policy. Tests at one period of life, whether of individual or race, are for that period alone and do not apply to a later period, when all conditions are changed and a new growth, quantitatively and qualitatively, is proceeding. It may often happen that ability of a high order does not appear in early years. If education is limited to this period, this ability may never be found. Education, if honestly and continuously applied, is a great discoverer. It goes straight to the mainsprings of action and discloses whatever power is there. It should be offered to all in unstinted measure and should thoroughly test and evaluate all.

Universal secondary education a special discoverer of power.— Elementary education, made universal, opened up a certain proportion of the human resources of the nation and world, and put in motion a certain degree of national and world power. Universal secondary education will make it possible to utilize resources and power, not in a second degree merely, but in a far higher degree, because of the peculiar vantage ground of secondary pupils, recognized in all ages and nations

[8] See Chapter XIX.

from primitive times on.[9] Adolescence teems with peculiar power that needs encouragement, direction, adjustment, special development, in short, a refining process, to fulfil its best. Elementary education deals largely with facts and forms and the simpler habits of life. Secondary education deals with great interests and enthusiasms and the higher and the final motive forces that project the individual into the technique of civic and industrial life. It is the time for making world citizens. Citizenship will be of a far higher type if the secondary period of education has the making of it. To be separated from solicitous school training, when the power that makes the citizen who makes the state is in the most critical stage of development, is a public calamity.

Universal in primitive times.— Secondary education was universal in the primitive tribes. The life of the tribe required it. As the civic unit grew, civilization neglected or restricted it. Old emphases were dimmed or lost; new emphases were not developed. Civilization in turn must restore what has been lost and add to it, if it is to be protected in systematic, safe, and effective development. We are no farther from universal secondary education, free to all, than the world once was from the same degree of elementary education.

What is to be the outcome? We instinctively forecast the future. In doing this it is evidently more natural, more profitable, and, at the same time, safer to consider the secondary school nearest us,— in some ways the most significant of all secondary schools, the High School of the United States. Each nation, while sharing in all the general movements of secondary education, has its own special history and, with it, its individual views and aims. Each has, and for some time will continue to have, its own distinctive policy in secondary education. All nations, however, are steadily assimilating their secondary schools to certain types that a constantly growing community of interests and the increasing similarity of life condi-

[9] At present there are in the U. S. 11,500,000 persons between 15 and 19 years of age (inclusive). Of these 4,100,000 are in school. Of 5,600,000 between fifteen and sixteen (inclusive) 3,100,000 are in school. A large task is therefore in front of us, as shown elsewhere. Full figures are given in the last Report of the Commissioner of Education, 1914–15.

tions the world over dictate. It is best here therefore to consider the future of our High School and leave the history and present and future status of other individual secondary school systems,— those of England, Germany, and France, for a separate volume.[10]

[10] See also Chapter XIX, pp. 301 f.

XXIII

THE HIGH SCHOOL OF THE TWENTIETH CENTURY — PROGRAMS OF STUDIES AND CURRICULA

Limitations of a forecast.— Can we, even in outline, portray the typical high school of the twentieth century? Yes and no. No, if on the basis of the interpretation of the secondary school to-day we attempt to apply certain preconceived notions of secondary education, or if we try to determine too many details that only the circumstances of the time can decide. Yes, if we have interpreted the signs of the last epoch rightly, if we take into consideration the convictions of leaders who are most intimately engaged in secondary school work to-day and get their view-points, and if we bring to bear on the matter an historical imagination that has been constantly exercised in an attempt to form clear and sympathetic mental pictures of the feelings, ambitions, and conditions that determined ideals and forms of secondary education in different epochs of its development. Any forecast thus seriously made is of value in stimulating secondary school thought, whether all agree as to the forecast or not.

In outlining the general form and modes of the coming high school we must keep in mind one or two fundamental thoughts that are to inform and infuse all that is said, whether mentioned specifically in every case or not.

The high school the key to national development.— It must, then, be recognized in all discussions of this kind that the high school is the key to the future development of the nation. A new mentality, new motives, new ambitions and enthusiasms, and a new physical life are the conditions with which the secondary school has to deal on the human side. At the high school age the great guiding habits of life, mental, physical, and, the resultant of the two, moral, are forming, adolescing. Great fields of thought and effort are being explored with ado-

lescent zest. Great trends of interest are being determined. The high school period is not so much a preparatory period as a determining and dominant one. It is not merely a second step or epoch in the evolution of the finished social agent; it is the central epoch. Its training is not a mere limb of education; it is its central nervous system. It is not a stage up the hill; it is a hill-top, with other hill-tops in sight, it may be, but still a hill-top, if not the hill-top. These different figures that represent secondary education as a preparation, a part of a system, an evolution, or, poetically, as the climbing of some fair mount, serve to emphasize the critical nature of this period of education. Our whole study has impressed upon us this fact, that the high school is the determining factor in American school life. It makes the university and conditions all that the uinversity does, as it gives the growing pupil his "set" in life. Primitive man felt this dominance; later man knows it.

A change in the aim of the high school.— The aim of high school education, as was shown in Chapter XXI, is therefore not to be from without, either generally from some higher institution, or, more particularly, from the urgency of some study with its compact body of facts and principles and its influential clientele to press on its claims and dictate its methods. The aim is to be from within, guided by a sympathetic study of the secondary school period and its implications and obligations. The idea has had a slow beginning. Habits of education, rooted in a strong educational polity that a former age developed and found peculiarly adapted to itself, both socially and politically, are naturally, and psychologically have to be, obstinate factors to modify. The new century is to bring to the front the real mission of the high school and provide for its ample fulfilment. Applying these ideas each form and process of the high school takes on new meanings and shows new possibilities.

Growth in the program of studies.— To begin with the program of studies, we shall find, by reviewing recent pages, that a very interesting development is in progress. We found that in the latter half of the nineteenth century modern studies came rapidly into the curriculum. Of the old studies Greek had passed as a required subject. Latin remained, but it was not

such an absolute requirement as before. Mathematics still kept their place, but they had begun to share their prestige with other studies. Science, history, and the fine arts had been adopted into the curriculum. The study of the vernacular was showing a finer development, to fill the place left by the waning classics; the previous enterprising classical study had paved the way for it. Vocational subjects had begun to make a definite place for themselves but they lacked standing.

How studies come into the program — Study changes in the twentieth century high school.— Studies come into the school in response to certain definite conditions. Conditions change, but conservatism tends to keep the studies and maintain their old importance. This is well illustrated by Latin.[1] Hence some educational material and some educational ends outlive their usefulness in the way in which they are applied. The secondary school to-day still clings to that which is outworn either in itself or in its method of application. The new century will advance the process of expurgation. It will see Latin reduced to an elective study. Algebra and geometry will not hold the same absolute position as to-day, nor will they lay claim to the same comparative training value. Science will be made more concrete and adaptable. The mechanic and fine arts are to have wider and finer applications. The vernacular will have a new development, unhampered by traditional classical methods that dominated all language study so long and still have great influence. It will prove an educational agent superior to Latin even in its own field. History is to become a more vital study, especially that phase of it called civics, which has often been a rather perfunctory member of the

[1] In early epochs the secondary school ministered to the few; preparation for professional life was simple and traditional; in politics absolutism favored a formal, memory study, such as Latin then was, rather than a study that developed independence and initiative. Latin was moreover a daily professional necessity, or was the only available literary language, in fact the only study that offered itself as a medium of mental training. Under such circumstances a more or less thorough discipline in Latin served as an excellent propædeutic to life. These conditions passed, but Latin remained with claims unmodified.

Again, well known circumstances (see XIX) gave us Greek in the eighteenth and nineteenth centuries. These conditions passed. Because Greek had less momentum than Latin in the curriculum, it quickly gave way and became an optional study.

group of high school studies. Its most striking development in the new high school is to be in the direction of "community civics." Through this new motif it is to take on new life and value.[2] With it will go a study of sociology, which by a simple and concrete method will open up a new world to high school students, revealing to them the fundamental forces of society, helping them especially to analyze and appreciate the local community of which they are a part, and cultivating a spirit of service. Vocational subjects will increase in popularity and in real value, and will assume a leading place. But, what is perhaps more significant than anything else in connection with high school studies, the physical side of education will be more definitely represented. There is thus to be a clear revision of the program of studies. There will be a more striking revision of the content of studies, but this point will be more appropriately treated later.

General character of study and instruction.— All these studies have a great future before them, because they lie at the foundation of the business and amenities of life. The twentieth century high school will not tolerate anything superficial in any of them. The new studies are to receive as broad and thorough treatment as any studies the high school has ever seen or heard of, and their demands upon the pupil will be as insistent. Even the newest studies that meet with disparagement in some quarters at first are to have as whole-souled respect and consideration and as careful planning as any, that they may do their part in developing intelligence, skill, and power, together with public-spirited efficiency. Cultural and practical are to unite in them, as in others. Work it is, solid, thorough, enthusiastic work, that here, as everywhere, will develop fineness of fibre and inspiration to real efficiency.

[2] To indicate the possibilities of such a course, especially when combined with sociology, the following outline by Mr. Clarence D. Kingsley, of the Massachusetts Board of Education, is suggestive: —

Essentials of community welfare: —

1. Health
2. Recreation
3. Education
4. Protection of life and property
5. Order in society (with its correlate, correction)
6. Wealth, with its correlate, charities
7. Beauty
8. Communication
9. Transportation
10. Migration.

Different kinds of thoroughness.— But this caution should be given, that there are different kinds of solidity and different kinds of thoroughness. There is one kind for adolescents, another for adults. We are here speaking of adolescents. Thoroughness has been a favorite word in education. It has often been applied inconsiderately, without noting that it is not an absolute nor a uniform term. What is said farther on as to study-content and method will be suggestive in this connection.

Number and range of subjects.— The names of studies thus far mentioned in connection with the program of studies are class names rather than individual names. Each one of them represents a whole group of specific studies. In the aggregate we have a multitude. There is, however, no danger of having too many. Adolescence needs a wide field for exploration before determining its settled interests. Even the old studies that conservatism leaves side by side with those that are more modern and that respond more fully to modern conditions, meet a natural interest in many, either for culture or for practical purposes. They may safely remain, provided there is no exaction in regard to them.[3] In this wide range of particular studies there is very definite unity, because they are classified in a few well-marked groups, as already indicated. In the coming high school the main guide will be groups of studies, rather than individual studies.

Vocational studies and physical education to be the distinguishing characteristics of the new program of studies.— As far as the program of studies is concerned the most conspicuous characteristic of the twentieth century high school will be its devotion to vocational education and physical education. As to vocational education it should be noted that it is not a new idea or policy. The curriculum of early schools was vocational in the extreme when it was establishing itself in remote centuries.[4] We have simply forgotten what the

[3] Latin and Greek are still very useful subjects under certain conditions. Work done in them has had great educational value. Only an equally enterprising training in the vernaculars can serve as an excuse for supplanting them.

[4] See Chapters XII and XIII. The term, vocational, is a misleading one, almost a misnomer. It actually means that education which pre-

vocations were and how the curriculum tried to meet them. The educational world has failed to keep the school closely related to vocations and to make it a full expression of the vocational idea, as was the case in the old school. The special significance of the whole vocational movement lies in the fact that the high school is no longer to rest on by-gone educational facts. It can no longer calm a rising educational conscience by tacking on here and there a new bit, without providing for more than a superficial articulation with the old. The twentieth century high school will make the vocational aim an integral part of high school polity and work it out effectively.

Vocations in modern times have been left in an anomalous position, as far as definite educational preparation is concerned. The future will demand thorough educational preparation for what we now regard as simple apprentice crafts. Various curricula adapted to different vocations will be laid out giving broad education as well as technical training. Only this will give real command of vocations. Only this will assure sound, happy, and progressive mental and industrial life. One great nation has proved its value as a means of occupying its opportunities in a rather wonderful way. Others must do the same. The inexorable law of the survival of the fittest will enforce this policy, if we do not heed higher and more beneficent laws.

The vocational idea part of a larger idea—"Social Utilities."— The vocational idea that is justly so prominent today and is to be more insistent in the future is only a part of a larger idea. A new scheme of concentration, not yet worked out, makes "social utilities" the starting point in determining the details of a curriculum. There will not be new study-names, but there will be ends and directions different from those that now rule, better adapted to high school pupils, more practical, and at the same time more cultural. The idea of "social utilities" again is not a new one, but a more scientific application of an old idea, and particularly an application to

pares one for his occupation, whether high or low, broad or narrow. In its current use it is thought of as applying to humbler occupations, more particularly those that are mechanical and commercial. Education for the so-called learned professions is vocational education as much as the other. Education has always been vocational, but it has been narrowly so. We are now simply extending it to its just limits.

new conditions. The old curriculum,[5] as it started, was an expression of social utilities. The utilities were those of the time. The "curriculum"[5] became stereotyped. Utilities changed and grew. There is going on a re-thinking of social utilities. Educators and the public are trying to find the real utilities of the present and to represent them genuinely and broadly on the high school program. The vocational aim would objectify education. The social utility aim would objectify it more broadly, because it directs attention to community as well as to individual ideals.

Education the greatest social utility.— In a way this idea makes education subjective as well as objective, for, if rightly applied, it stimulates pupils to make education an interpreter of outside obligations and to think of courses and curricula in terms of public service as well as of personal advancement, or rather in terms of personal advancement through public service. It encourages them also to think of education itself as the greatest social utility. Studies thus become more than formal training factors; they become agencies of social efficiency. The new studies are not to be ends, but merely agents in bringing the pupil into contact with present day life at its strongest and in equipping him to subserve and advance it with some power of initiative under the inspiration of community spirit.

Physical education fundamental.— The second distinguishing characteristic of the coming high school program, as already suggested, will be its contributions to physical education. This point calls for a more special word than others, because it has come less definitely and seriously into the program of studies and because some phases of physical education are not even yet thought of as legitimate parts of that program. The whole matter has oftener than otherwise been an object of indifference and neglect, or at least has had but accidental care. The physical is more fundamental than history or geography, science or mathematics, or any other courses. All that concerns physical development therefore has a superior claim on the attention and effort of teachers.

Misplaced physical education.— The physical and the mental sides of education require very fine adjustment to prevent

[5] "Curriculum" and "program of studies" were identical then.

them from hindering one another. Physical education may easily be so conducted as to times, seasons, and amounts, and as to its relations to other parts of education, that the mental powers will be rendered dull and heavy instead of buoyant. The twentieth century high school is to work out these relations justly.

Character of work in physiology and hygiene.— In coming curricula there will be a definite study of physiology and hygiene, but largely of a biological nature and of the most concrete type, calculated to develop a healthy interest and sound and broad thinking on the subject. But, more and better than this, physical training in the high school is to consist largely in the practice of hygienic living. The whole school life and all school conditions are to be so organized that this practice will become a natural and regular part of the pupil's regimen. It is habits that we need, to make the study of the physical of any value. The pupil is to write his own book on physiology in living characters.

Hygiene of school plant and school room.— In the first place special attention is to be given to the school plant and the school room. The adolescent is in a state that is well called unstable equilibrium. Everything suggests tension. Light, temperature, seat conditions, air space, and particularly the general environment of the school are to be such that the least possible strain will result. These things are not mere conveniences for formal school work, though they sometimes seem to be considered as such, but they have a definite function to perform in promoting physical well-being and development and in determining educational results generally. More scientific investigation of this topic and better ideals are to come.

More work outside — Less work with books and laboratories inside.— In the second place more of the school work is to be done out of doors. Entirely aside from open-air classes, which have a distinct mission, there is to be less of books and close laboratories within brick walls and more work with the greater books and laboratories outside. Such methods will bring stronger scholarship, more real appreciation, a better foundation for life, as well as for the university,— a

stronger man on all sides, more appreciative of nature and of community life. History, civics, economics, physiography, geology, botany, physics, chemistry, and even Latin will be the better for such work. They all give opportunities for the abounding activity and the peculiar impulses to expression found in adolescence.

Physical exercises — Games and sports.— In the third place stress is to be laid upon the physical development that comes through physical exercises of the school, and particularly through games, sports, and general out-door exercise that appeal to adolescent life. Physical training involves not only games, but competitive games, for they are as much a part of it as special-interest exercises are a part of history, or as contests in writing and debating are of courses in English, or drawing competition of the course in art. But their function is that of developing interest, not that of climax, as has too often been the case.

Advance in athletics.— With the possible exception of England little advance in athletics has been made for two thousand years. Most of the time there has been actual retrogression. The matter was taken up where it was left so long ago, and not infrequently the imitation has fallen short of the original. Much of the talk about athletics has been of the contagious, imitative sort. In fact feeling and thought here give one of the finest illustrations of the "psychology of the mob." This has been true in part of writing upon the subject, but there has been more evidence of balanced judgment in this direction. The twentieth century high school is to remedy all this. It is to organize and administer athletic interests as an intimate part of its educational scheme.

Adolescent characteristics guide.— But the high school must do this with a warm appreciation of adolescent needs. There are certain well marked adolescent characteristics that must guide in this. Two claim our attention at the outset,— one looking back, the other looking forward. On the one hand there is something elemental in adolescent physical nature,— a love of force and of feats of pure strength for their own sake, an exultation in might as might, a keen delight in the mere feeling of stress and strain. This is a natural outcropping of

exuberant adolescent nature, not a perversion. It is as worthy of recognition as any other adolescent characteristic. On the other hand, the adolescent has reached the organizing age, as opposed to the particularizing tendencies of the earlier school period. At the same time he shows some appreciation of art. He can appreciate good form, articulation of parts, not the finest, but effective, and that which results from these, a feat of skill, which is art made practical. Put together these two marked characteristics, giving each the importance due the developing adolescent, and we shall get a fine combination of native force and skill and art in place of crude force. The elemental has run riot and monopolized attention under a laissez-faire policy. This elemental must be directed and supplemented, and other forces must be guided and strengthened. This is education. Legitimate development of athletics is as much a part of education as training in algebra, probably more so. This part of education, like others, must be accomplished by instruction, not coaching, which has as little place as examination tutoring. Not rules, nor faculty regulations, but instruction, involving contests, is to be the fundamental agency in the case. We cannot legislate ideals here any more than we can legislate morality. We can and must provide conditions and opportunities and take athletics into our school plan. The "coach" must be raised to the position of a regular instructor, and he must have an all-round training for his work.

More variety in athletics.— Another adolescent characteristic, quite as important, must be taken into account. The adolescent has no settled attention or intention. There has been an upheaval of physical and mental life, and he has not settled down to regularity. The will is not yet finally steadied. This, added to the obvious fact that interests are not uniform in any group of individuals, dictates a variety of interests in athletics. The stream of athletic spirit will not be satisfied with two or three channels. Yet the weight of influence and recognition has been thrown in only a very few directions, (practically in three), of one particular phase of athletics. Wide sympathies will help in the solution of the problem. There must be official recognition of many forms of games and sports, as well as of various general physical exercises

which have not crystallized into games; and physical feeling and sentiment must be developed in new lines as occasion arises. If, with effort, and sometimes with considerable effort, enthusiasm has been roused for some of the current forms of sports, the same can be done for others suited to adolescent life. Football really attracts but a mere handful of students for actual participation, baseball another handful, aquatics another. With so many adolescent physical interests this is to be expected. The twentieth century high school is to recognize the fact that the athletic side of physical training represents a group of interests; it is to make this group an intimate part of every curriculum and to treat it as generously as any group for its training possibilities.

The physical side of education with broad instruction and varied application, including games, is therefore to form an essential part of the high school program. The new high school is to be as sharply distinguished from the old by this fact as by its contributions to vocational education.

But there is another side of physical education that the twentieth century high school will include among its courses. The study of social hygiene, and particularly sex hygiene, will be even more characteristic of the new epoch in secondary education than what has just been noted. One of the basal problems involved in every institution and every constructive movement for the betterment of society is related to sex hygiene. The problem is an insistent one because it has thus far been ignored or treated in an apologetic and academic way. A taboo has been placed upon it that is absolutely unjustifiable. One difficulty has been that the subject lies at the meeting place of two psychologies, the psychology of the adolescent and the psychology of the adult, neither of which appreciates the other, one because of its immaturity, the other because it has forgotten. That the study of sex hygiene in the high school is imperative can be shown in many ways and from many points of view, without giving any countenance to certain statements of irresponsible high school critics. The adolescent is now left to organize a whole group of vital adolescent qualities related to sex and to develop them with absolutely no systematic education or guidance. With a more sympathetic knowledge of the psy-

chology of adolescence, particularly with a more accurate and vivid understanding of those attitudes and impulses, ideas and powers that refer to the maturing of sex functions and the correlative development of the social instinct, and with larger views of the relation of secondary instruction to social problems, the coming high school is to bring the subject of sex hygiene to the place of honor and importance that it deserves in any program of studies. Instruction rightly fortified purifies; ignorance courts evil.

A high school course in sex hygiene must be built upon cooperation in the home, involving the removal of an essentially criminal taboo and the substitution of naturalness balanced by advice and instruction, and upon preparatory work in the elementary school, so that, when adolescence is reached, young people will not think of sex and social ideas as strange, forbidden topics, but will look upon them so naturally that they will cause no remark, not even the lifting of a brow. Building upon this antecedent work the high school may prepare simple courses adapted to adolescence.[6] The general aim of such courses will be to meet the craving for knowledge of the mysteries of life current at this period and bound to be satisfied in some way, to build up natural and helpful ideas and habits, and to lay a foundation for personal hygiene of the highest type. Prominent among the specific aims will be, to develop a pure and wholesome interest in sex matters, to impress with the facts of sex hygiene, to arouse a wholesome fear of illicit and abusive use of sex organs, and correlatively to stimulate a pride in family and race which such abuse retards in physical and mental power and in prestige, and eventually brings to dishonor and decay.

The principle or spirit of the work will be frankness as to reproductive processes, absolute naturalness, but not baldness, free from all embarrassment.

Courses in sex hygiene will include instruction and training as to sex matters in general and as to personal sex ideals. The

[6] To outline in detail studies for the elementary school and courses for teachers and pupils in the high school, with extension courses needed for general instruction, is beyond the purpose here. All that will be attempted will be to suggest aims and some of the larger features of instruction.

age is favorable; means are abundant. Instruction will of course be given in connection with the study of natural science, particularly biology. This instruction will be merely incidental and correlated, but at the same time it will be of great value for the great purpose in view. The main reliance will be upon specific courses in sex and social hygiene, which shall emphasize, in one direction, the value of sound sex organs and the danger of abuse, with concrete illustrations from the wealth of cases open to any one who seeks, and, in the other direction, the obligations of the individual as a social factor. As a foundation for such work the courses will include a sensible study of sex physiology fully in accord with the pedagogy of adolescence.

Correlatively with this instruction, to give it real value, a school spirit must be established and embodied in dynamic ideas and aims. On the one hand the school must impress as one of its ideals a well-developed physique, with the suggestion that sex abuse often results from some physical unevenness and unsoundness, from a loose physical screw somewhere. On the other hand the school must encourage wide interests and sympathies that will furnish exercise for the mind, particularly for the emotional life, with the idea that a person of narrow interests and thought is more likely to give attention to unhealthy sex suggestions. Both mental and physical gaps require filling and it is in no small part owing to this principle that thoughts turn toward sex matters. If the void is filled with things worth while, the current of sex thought may often be turned off. With its rich courses and its work in vocational guidance, more broadly termed educational guidance, for it is such, especially with its finer adjustment to present social needs and social utilities, the twentieth century high school is in a strategic position to plan for each student a broad curriculum that will supply these "filling interests."

Program of studies and curriculum.— We found that in the last century it was no longer possible to speak of a single curriculum in the secondary school, but of a program of studies that divided itself into several curricula, having some studies in common, it is true, but yet essentially distinct. This diversity of studies and curricula very naturally brought in the principle

of election, generally election between different well-marked curricula. The new century is to extend the principle to wider choice, because preparation in every line is broadening and because general ends are complex. The mechanic arts department, or the scientific department, for example, will offer preparation for several differentiated vocations, each requiring a somewhat different line of training.

Each department to have a program of studies divisible into several curricula.— In other words, in the twentieth century high school we shall not be able to speak of a scientific curriculum (or "course"), a mechanic arts curriculum, etc. Each department will become so broad, will contain so many separate technical studies, and will profitably include for general training, as a foundation for special training, so many studies from the general high school program, that it will have its own special program of studies. From this program different curricula will be formed to meet individual cases and the needs of whole groups of pupils. Election will therefore have broader scope in the high school.

Election to give place to educational guidance — Vocational guidance.— But election is a crude agency working toward a great end. It is to give place to educational guidance and issue in vocational guidance.[7] Both educational guidance and vocational guidance involve several very definite conditions,— opportunity to exploit several lines of interest, before settling on a final choice; confidential relations between teacher and pupil as a basis for frank and intimate talks; methods of presentation, including adaptation of content, that will show the study, or course, or group, or occupation and their implications at their real value.

A study of vocations.— But further than this, true vocational guidance implies and necessitates the addition of a new study to the program, a study of vocations, that will take rank as one of the most important studies of the high school. The method of teaching and administering this study will involve

[7] Educational guidance is to be more important than vocational guidance, or rather, the latter is to be so broadened and is to become so fully a part of the school program, instead of a supplementary and gratuitous matter, that the two will coincide.

the collection of full and enlightening data as to occupations and trades,— not mere figures and commercial items, but history, past and present, opportunities for advancement and culture, means of organizing one's life in the trade and vocations so as to develop an all-round, public spirited man or woman, and various other details of a kindred nature. Such topics will form a basis for investigation and discussion, on the part of students and teachers, that will not only furnish a body of practical knowledge, but will afford means of thought training and personal development equal to any in the school. Educational guidance will thus become not a superficial and perfunctory matter, but an intimate part of school polity. It will aid constructively in the great enterprise of choosing and enriching occupations. In this connection the pupil will not be obliged to make final choice of curriculum or occupation at the outset. Early choices, whether of studies or vocation, are to be neither fatal nor valueless.

No random choices.— It is plain from what has been said that in this wide range of studies and programs individual selections are not to be random nor are they to be such as to make individual curricula fragmentary and superficial. There must be consistency and unity. Several principles, in addition to those that are implied in the preceding paragraphs, are at hand to guide in choices and thus to help toward consistency.

1. **Re-valuing of studies shows equality in educational values.**— As we have seen, recent educational thought has been re-valuing studies. The tendency is to consider each study the equal of any other in essential training values, though different in content value, which is determined by the exigencies of individual situations. In the twentieth century high school each study will be made so broad, will show so many implications, so much history, so much culture material, so much practical value, that it will be on a par with any other study-agent as a medium for developing essential power. It will appeal both for its fitness as a means of preparing for some special calling, and for its cultural value, its intellectual value, and its stimulus to achievement. This is true of individual studies. It is more significant in study-groups. We are to reason and organize by groups. We may even go further in speaking of equalities in training-

values and say that no study-group has a monopoly of training-value in any one direction. Every natural group of subjects constitutes an essential element in the development of any power. No power is simple; it is complex, many-sided. Language work is as essential for developing observation power as is science. In the development of language power the classics are not supreme, but ancillary and subordinate.[8] Mathematics and science are quite as important in developing imagination as are literature and history. In cultivating esthetic feeling more than fine pictures and architecture and music and landscape gardening are essential. The finest artistic sense, after all, comes from giving to everything in school organization, program, and method, and to everything in school environment, order, symmetry, and harmony of adjustment,— in bringing out in everything its own intrinsic fitness and adaptation.[9]

2. **Limitations in training-value of studies.**— This principle is closely related to another: — Power gained through training in one subject does not spread in other directions except in a very general way.[10] The two principles are essentially one,

[8] The so-called disciplinary power of the classics can no longer be a shibboleth. Besides, that is not the end of classical study at the best. We get out of subjects what has been put into them, and we get their value only when we bring them close to the personality of pupils. Latin was once the only study in which, to any extent, nations and individuals had put their best thought. Other subjects were incidental or had suffered long lapses. Since that period other subjects have received the best the classics contributed and have added to this from spontaneous development in the special fields in which they apply. Hence other culture-disciplinary subjects have arisen. They are such because of the thought, effort, and system put into them. Any one may well be enthusiastic over his subject and make it a real culture subject. President Eliot was not fanciful when he said that manual training offered as much discipline as the classics. His view of the subject was a broad one. In fact, if we take up any of the subjects that have come, whether lightly or heavily, into the program, and look beyond the formal side and the bare facts that it involves in its narrowest aspect,— if we see its human relations, its history, its place in history, its correlations, in a word its cultural relations,— then its place in a curriculum, whether we look at it from the point of view of information, or from that of culture and training, will take on new force and meaning.

[9] Emphasis in this discussion is on the group. What is true of the group is more impressively true of individual studies. They cannot support their traditional claims to extravagant training value in certain directions. Note here the tendency to question the validity of algebra and geometry in some curricula (those for girls), and elsewhere.

[10] It is generally stated in another form: — Special training does not

only they approach the truth from different directions and so present different sides of it. The principle is self-evident now, but the educational world thought the reverse for a long time, because educational experience was narrow and experimental psychology had not come.

Two corollaries follow from this principle or double principle: 1. Training, to be effective, must be many-sided. 2. A person is not a real or trustworthy expert who knows no other line of work or thought but his own, who has not wide correlated knowledge. Over-specialization defeats its own end.

3. **The individual the unit.**— A third principle is coming into emphasis: — Not the mass or the class, but the individual is the real unit. The individual is the final reservoir of strength, and it is his interest that must be determined and met, if the native strength of a community is to be realized. Mass teaching is wasteful, because it produces so many dwarfs.

Individual adjustment the key.— Individual adjustment, adjustment to individuals and individual situations, is thus to be the key to the organization of curricula, and the same key will apply to method, which will be considered farther on. This is the real meaning of election and its successors, educational guidance and vocational guidance, which are the media through which the individual needs of the adolescent are to be satisfied. This principle is supported by the other principles of secondary education that guide and define it. Adjustment is not a simple matter. Mere likes and dislikes may be only surface matters or imaginings. Any study may be made to appeal to the normal adolescent. It depends upon finding the point of contact, which in turn depends upon our knowledge of the adolescent and our method of presenting the subject.[11] To make a pupil strong we do not need a multitude of subjects,

give general ability. Stated in this way it is liable to misinterpretation, because there are so many seemingly contradictory facts. Interpreted in an extreme way, as has sometimes been done, it is essentially untrue. The principle represents an historical fact. It is clearer and more impressive historically than pedagogically.

[11] If, after all, there is found to be a persistent antagonism to a subject it simply means that the nascent period for awakening an interest has been passed, or has not yet been reached. Perhaps some blunder, some poor teaching in the initial presentation of the subject, has closed the door, or made it very difficult to open it.

but close association with great departments of knowledge and work. In fact multitude would defeat our purpose.

Broadening of choice.— With the increase of subjects and curricula wide choices are open. At the present time the principle of choice is generously applied between curricula, but more sparingly allowed within curricula, sometimes not at all. It is rather common to specify groups of allied subjects from which choice may be made. The advance is to be in the direction of wider and wiser choices within curricula, so as to secure better adjustments.

Reform in terminology.— The development of studies and curricula will be accompanied by a revision of terminology, making it more exact and scientific. Requirements and regulations will thus be stated more uniformly, and plans and reports will be more easily interpreted. At present, as already shown, units of work take the place of fixed courses, but a glance at current curricula[12] shows that there is no uniform mode of naming these units. Sometimes they are spoken of as hours, sometimes as points, sometimes as credits, sometimes as units. It is, however, fairly easy to make out that on the average requirements for graduation are sixteen courses, each course representing five prepared exercises each week for thirty-six weeks, i.e., sixteen units of work. It is neither necessary nor desirable that the quantity should be specifically the same in all schools or in all localities, but it is desirable that when talking or writing on these matters we should use the same terms and that the terms should have a uniform value.[13]

While election and the unit idea of measuring results and qualifications have served the cause of individual adjustment, they have also undoubtedly had the effect of toning up the weaker courses,— strengthening their subject matter and the methods of teaching them. Reform in one part of a system in a way reforms all.

The new century's inheritance and problems.— The development of high school problems and curricula in the nine-

[12] See appendix.

[13] Dr. Charles Hughes Johnston, of the University of Illinois, has done some pioneer work in this direction that ought to pave the way for reform. See page 304.

teenth century showed specifically and vividly the wonderful expansion of secondary school ideas. Growth, however, was feverish and without settled aims. The twentieth century will systematize the scattered results of the nineteenth century and apply secondary school principles more exactly. The development of the new century is evidently to be more scientific, more definite, more aimful. It is to be based on finer generalizations from a broader and more accurate knowledge of high school facts and relations, and a more scientific knowledge of the characteristics of high school pupils.

APPENDIX

TYPICAL HIGH SCHOOL CURRICULA AND PROGRAMS.

Basis of choice.—The aim in this appendix is (1) to select current curricula that represent types on which school thought is converging; (2) to present curricula that are specially notable, or distinctive and suggestive, but still show the fundamental elements of the average progressive school of to-day. These curricula show the culmination of nineteenth century movements and suggest certain prophecies for the future. The curricula of many other schools equally interesting might have been selected from the large number received from all parts of the country. The main idea is to get at types rather than individuals, averages rather than special adaptations to local conditions.

1. **Successors of the old classical curriculum.**— The classical curricula, the successors to the secondary curricula from which all modern curricula are descended, will naturally be the first to be noted.

(a) *An Eastern Classical High School,*— exclusively a college preparatory school, offering the standard classical curriculum approved by leading colleges and universities. The curriculum is arranged for six years, thus showing its relation to the old European Grammar Schools that took the boy at nine and started him early in Latin, or rather Latin grammar. It is also arranged for four years for those who have covered the two preliminary years in the elementary school.

A Six-Year Curriculum

First Year (Class VI.).	*Periods per Week.*	*Second Year (Class V.).*	*Periods per Week.*
English	5 or 6	English	5 or 6
Latin	5	Latin	5
Arithmetic and Geometry	5	Arithmetic and Geometry	5
History	2 or 3	History	2 or 3
Geography	2	Geography	2
Physiology	2	Elementary Science	2

First Year (Class VI.).	*Periods per Week.*
Physical Training	2
Choral Practice	None or 1
	24 or 25

Second Year (Class V.).	*Periods per Week.*
Physical Training	2
Choral Practice	None or 1
	24 or 25

Third Year (Class IV.).	*Periods per Week.*
English	4
Latin	5
French	4
Mathematics	4
History	3 or 4
Elementary Science	1 or 2
Physical Training	2
Choral Practice	None or 1
	24 or 25

Fourth Year (Class III.).	*Periods per Week.*
English	3 or 4
Latin	4 or 5
French	3
Greek or German	5
Mathematics	3 or 4
History	2 or 3
Physical Training	2
Choral Practice	None or 1
	24 or 25

Fifth Year (Class II.).	*Periods per Week.*
English	3
Latin	4 or 5
French	3
Greek or German	5
Mathematics	3 or 4
History	3
Physical Training	2
Choral Practice	None or 1
	24 or 25

Sixth Year (Class I.).	*Periods per Week.*
English	4
Latin	5
Greek or German	5
Mathematics	4
Physics	5
Physical Training	2
	25

FOUR-YEAR CURRICULUM

First Year (Class IV.).	*Periods per Week.*
English	4 or 5
Latin	6 or 7
French	4
Mathematics	4
History	3 or 4
Physical Training	2
Choral Practice	None or 1
	25

Second Year (Class III.).	*Periods per Week*
English	3
Latin	5 or 6
French	3
Greek or German	5
Mathematics	3 or 4
History	2 or 3
Physical Training	2
Choral Practice	None or 1
	25

Third Year (Class II.).	*Periods per Week.*
English	3
Latin	5
French	3
Greek or German	5

Fourth Year (Class I.).	*Periods per Week.*
English	4
Latin	5
Greek or German	5
Mathematics	4

Third Year (Class II.).	*Periods per Week.*	*Fourth Year (Class I.).*	*Periods per Week.*
Mathematics	3 or 4	Physics	5
History	3	Physical Training	2
Physical Training	2		
Choral Practice	None or 1		
	25		25

(b) *Another Eastern High School* has a double classical curriculum, one of four years, and the other of five years (evidently for those who need wider and longer preparation for college work). Still another high school from the same section offers a five-year and a four-year curriculum, and a second five-year curriculum for those who wish to take a longer time for the work of the four-year curriculum.

(c) *A Western High School* offers an enterprising curriculum of four years and a two-year addition that prepares for advanced work in the university or gives special opportunities for extended training for those who cannot undertake college work. The curriculum is as follows:

CLASSICAL CURRICULUM

B 9
1. English
2. Latin
3. Greek History
4. Physical Geography *
5. Chorus, Drawing, Music (2), 0

A 9
1. Continue B9
2. Continue B9
3. Roman History
4. Continue B9
5. Continue B9

B 10
1. English
2. Algebra
3. Latin
4. Greek
5. Chorus (2), Drawing (3), Expression (2), Music (2), Debating (2) 0

A 10
1. Continue B10
2. Continue B10
3. Continue B10
4. Continue B10
5. Continue B10 0

B 11
1. English B11, A11, or B12
2. Geometry
3. Latin
4. Greek
5. Chorus (2), Drawing (5), Expression (2), Debating (2), Music, Journalism (2) 0

A 11
1. Geometry
2. Latin
3. Greek
4. Physics, Household Physics, Chemistry or Domestic Chemistry (B12)
5. Expression or Debating required if not taken before

B 12
1. Latin
2. Greek
3. Physics, Household Physics, Chemistry or Domestic Chemistry (A12)
4. American History
5. Expression, Debating, Journalism (2) 0

A 12
1 English
2 Latin
3 Greek
4 Civics
5 Expression or Debating
(2) if not taken before.

B 13 and A 13
English Composition, History of England, French, Spanish, German, Music, Latin (Cicero de Senectute, Pliny, Livy, Plautus), Greek (Plato's Apology and Crito, Homer's Odyssey), Greek and Latin Composition, Solid Geometry, Trigonometry, Analytics, Logic, Physics (Mechanics and Heat), Chemistry (Qualitative Analysis, Lectures on General Chemistry), Botany, Zoology, Physical Culture, Playground.

B 14 and A 14
English Literature, History of Europe since 1815, Oriental History, Economics, Psychology, French, Spanish, German, Latin (Horace, Tacitus), Greek (Euripides), Greek and Latin Composition, Higher Algebra, Calculus, Physics (Electricity and Magnetism, Sound, Light), Chemistry (Quantitative Analysis), General Inorganic, General Organic, Organic Laboratory, Agricultural Chemistry, Astronomy, Geology, Physical Culture.

o Subjects so marked may be omitted.

1. There are five recitations a week in each subject except in those otherwise designated.

2. Sixteen units of work are required for a diploma. One unit represents a year of work in a subject taken five times a week.

3. Physical Culture two periods each week is required in every grade in addition to the sixteen units mentioned above. Military drill is the form of physical culture required of boys of the tenth grade.

4. Pupils from other accredited schools will be credited with all work completed.

2. **General curricula: —**

(a) *An Eastern High School.*

PROGRAM OF STUDIES

FIRST YEAR

	Periods Per week.	Points.
*English I	5	10
*Latin I, or German I, or French I	5	10
*Mathematics I, Algebra	5	10
*Science I, Biology, including Botany, Zoology and Physiology	5	10
*Drawing I	2	2

	Periods Per week.	Points.
*Music I	1	1
*Physical Training I	2	2
*†English VI, Elocution I	1	1

†NOTE.— A continuation of the course in Elocution is also offered through the second, third and fourth years. When so taken add one point per year.

SECOND YEAR

*English II	3	6
*Latin II, German II, or French II	5	10
*Mathematics II, Plane Geometry	4	8
*History I (Greece and Rome)	3	6
Greek I	5	10
Italian I	5	10
Spanish I	5	10
†Science II, Chemistry	5	10
*Drawing II	2	2
*Music II	1	1
*Physical Training II	2	2
**Domestic Science (for girls)	4	4
Physiography	4	8

†NOTE.— Science II, Chemistry, may also be taken in the fourth year.
**NOTE.— In the course offered to girls, Sewing — 4 periods per week, is an elective.

THIRD YEAR

*English III	3	6
*Latin III, German III, or French III	5	10
*History II (England)	2	4
Science III, Physics	5	10
†Mathematics III, Algebra, Review and Advance	2	4
†Mathematics IV, Plane Geometry, Review and Advance	2	4
Greek II	4	8
Italian II	4	8
Spanish II	4	8
Stenography and Typewriting I	4	4
Bookkeeping I	3	3
Economics I	3	6
†Science IV, Botany, Advance	4	8
†Science V, Zoology, Advance	4	8
Music III	1	1
Drawing III	1	1
*Physical Training	2	2

†NOTE.— Either course in Mathematics, Science IV, Botany, Advance, and Science V, Zoology, Advance, may also be taken in the fourth year.
NOTE.— In the course offered to girls, Cooking, 4 periods per week, and Millinery, 3 periods per week, are electives.

FOURTH YEAR

	Periods Per week.	Points.
*English IV	3	6
Latin IV, German IV, or French IV	4	8
Greek III	4	8
Italian III	4	8
Spanish III	4	8
Latin V, Additional and Supplementary Courses	3	6
Greek IV, Additional and Supplementary Courses	3	6
English V, Additional and Supplementary Courses	3	6
Science VI, Physiography	4	8
*History III, American History and Civics, Related English History	4	8
Mathematics V, Advanced Mathematics	4	8
Stenography and Typewriting II	3	3
**Domestic Science I	3	6
Commercial Law and Commercial Geography	3	6
History IV (Mediæval and Modern)	3	6
Music IV	1	1
Drawing IV	1	1
*Physical Training IV	2	2

**NOTE.— In the course offered to girls, Dressmaking, 4 periods per week, is an elective.

"Students following this program shall present for graduation the satisfactory completion of the required work in subjects *starred* above and shall be given credit for the number of points indicated upon the satisfactory completion of each subject. The requirement for graduation shall be the satisfactory completion of work aggregating 150 points and the passing of such examinations as shall be set."

(c) *A High School in the West:* —

"Note — No one shall be graduated who has not satisfactorily completed all the work required in one of the four lines of work: the Academic, including the Commercial; the Manual Training; the Technical; or that of the School of Trades.

"In any curriculum except the Technical or Trade sixteen units are required for graduation and at least twelve of these units must be earned in academic subjects. The first two years' work in Drawing, one of free-hand and one of mechanical, two periods per week each year, is required for graduation and is equivalent to a half unit. The other three and one-half units may be made by work in elective academic subjects or in unprepared work as defined below:

"Two periods of work in unprepared subjects are equivalent to one period in prepared work. Work in the following subjects is considered unprepared work: Manual Training, Drawing, Typewriting, Laboratory Work."

ACADEMIC CURRICULUM

Grade	*Term*	*Prescribed Work*	*Electives*
IX	1	English .....*5 Algebra .....5 †Ancient History....4 Drawing 2	ELECT ONE Latin ..... 5 German ..... 5 Elementary Science ..... 4 Elementary Science (First Term), 4; Arithmetic (Second Term) ..... 5 Manual Training 10
	2	English .....5 Algebra .....5 †Ancient History....4 Drawing 2	
X	1	English .....5 Plane Geometry.....5 Drawing 2	ELECT TWO Latin ..... 5 German ..... 5 French ..... 5 Greek ..... 5 English History ..... 4 Bookkeeping ..... 5 Botany ..... 4 Typewriting ..... 5 Manual Training 10
	2	English .....5 Plane Geometry.....5 Drawing 2	
XI	1	‡Physics 5	ELECT THREE English ..... 5 Latin ..... 5 German ..... 5 French ..... 5 Greek ..... 5 Spanish ..... 5 Mediæval and Modern History ..... 5 Zoology and Physiology.... 5 Algebra (First Term), ... 5 Solid Geometry (Second Term), 4; or plane Geometry (Second Term). 5 Bookkeeping (First Term); Banking and Office Practice (Second Term)..... 5 Stenography ..... 5 Typewriting ..... 5 Drawing, Optional ..... 2 Manual Training 10
	2	‡Physics 5	

* The figure after a subject denotes the number of periods given to that subject weekly; an academic subject taken four or five hours per week for one year is credited as one unit toward graduation.

Grade	*Term*	*Prescribed Work*	*Electives*
			ELECT THREE
			Latin 5
			German 5
		English 5	French 5
	1	‡Chemistry 5	Greek 5
			Spanish 5
			American History and Civics 5
			Chemistry 5
XII	———	———	Psychology and Economics.. 5
			Geology and Astronomy.... 5
			Trigonometry (First Term) 4
			Advanced Algebra or Analytical Geometry (Second Term) 4
		English 5	Commercial Law (First Term); and Commercial Geography (2d Term).... 5
	2	‡Chemistry 5	Stenography 5
			Typewriting 5
			Manual Training 10

3. **Commercial curricula:—**

(a) *A High School of Commerce in a large New England city.*

"Purpose.—The purpose of the High School of Commerce is to give a special training that will help its graduates to find employment in the business world, and, also, to give a general training that will aid these graduates to earn promotion to the more responsible business positions and equip them for the duties of citizenship. Special attention is given to the development of habits of punctuality, industry, self-reliance, and trustworthiness, as these qualities are absolutely essential to the highest success in the business world.

"The curriculum has not been planned to meet the requirements for admission to college, but the school does prepare young women to enter the Secretarial School of Simmons College and young men to enter the School of Commerce, Accounts, and Finance of New York University and the Wharton School of Finance of the University of Pennsylvania. This makes it possible for any graduate of the school, if he so desires, to secure a college education."

FIRST YEAR

First Semester		*Second Semester*	
English	5	English	5
Science	5	Science	5
Penmanship and Commercial Arithmetic	5	Penmanship and Commercial Arithmetic	5
Local History, Government, and Industries	5	Bookkeeping	5
Physical Training	2	Physical Training	2
Total	22	Total	22

SECOND YEAR

First Semester		*Second Semester*	
English	5	English	5
General History	5	General History	5
Bookkeeping	5	Bookkeeping and Office Practice	5
Commercial Geography	5	Commercial Geography	5
Physical Training	2	Physical Training	2
Total	22	Total	22

THIRD YEAR

First Semester		*Second Semester*	
English	5	English	5
American History	5	Civil Government	5
Optionals	10	Optionals	10
Physical Training	2	Physical Training	2
Total	22	Total	22

FOURTH YEAR

First Semester		*Second Semester*	
English	5	English	5
Political Economy	5	Commercial Law	5
Optionals	10	Accounting and Office Methods	5
		Optionals	10
Total	20	Total	25

OPTIONALS FOR THIRD AND FOURTH YEARS

Stenography	5	Geometry	5
Typewriting	5	Physics	5
Commercial History and Finance	5	Chemistry	5
Drawing	5	Physiology and Hygiene	5
Algebra	5	French	5
		German	5

The figure after the name of each subject indicates the number of recitations per week in the subject.

(b) *Another New England city* offers a broader curriculum with a large number of electives, though with rather limited opportunity to apply the elective principle. Some of the subjects that are elective in (a) are required in this curriculum.

(c) *A city in the Pacific Section* offers a curriculum which is entirely elective and so gives wide opportunity for individual adjustment. See also the program of studies under 8.

4. Vocational curricula:—

(a) *A High School in an Eastern city.*

Boys

First Year

Joinery (½ year) 6
Sheet Metal (½ year) 4
Turning and Pattern Making, and Foundry 10
Drawing 5
Practical Mathematics 5
English 4

Second Year

Forge Shop (½ year) 6
Sheet Metal (½ year) 4
Machine Shop 10
Drawing 5
Practical Mathematics 5
English 4
Natural Science 3

Third Year

Machine Shop (½ year) 10
Any Shop (½ year) 10
Drawing 4
Practical Mathematics 5
English 4
Physics or Chemistry 5

Fourth Year

Any Shop (½ year) 10
Drafting (½ year) 4
Any Shop or Drafting 20
Practical Mathematics 5
English 3
U. S. History and Civics (½ year) 5

Note: — The above course is intended for students who wish to fit themselves for a definite vocation.

Girls

First Year

English 4
Natural Science 5
Cooking and Sewing 6
Applied Art 4
Select One:
German or French 5
Arithmetic or Algebra 5

Second Year

English 4
Chemistry of Foods and Cooking 6
Dressmaking 4
Designing 4
Select One:
German or French 5
Physics 5
History 5

Third Year

English 4
Hygiene and Home Sanitation. 5
Millinery 6
Invalid Cooking 4
Select One:
Applied Art 4
German or French 5
Chemistry 5

Fourth Year

English 4
Art History 5
Select three:
Biology 5
German or French 5
U. S. History and Civics 5
Dressmaking 6
Millinery 6
Applied Art 6
Any Household Art or Science. 6
Any subject of General Course 5

(b) The following curriculum of a *Manual Training High School in a Middle West city* shows the possibilities of curriculum-making in various vocational directions by a skilful coordination of required and elective work under educational guidance. Studies in capital letters are prescribed and are to be taken in the order given. Thirty-one credits are required for graduation, a credit standing for five class exercises of prepared work per week for a half year.

First Year

English I	English II
Algebra I	Algebra II
Latin I	Latin II
German I	German II
Am. History Ia	Am. History IIa*
History I (Grecian)	History II (Roman)
Physical Training I	Physical Training II*
Woodworking I (Bench Work)	Woodworking II (Wood Turning)
Freehand Drawing Is (For Shop Pupils)	Freehand Drawing IIs
Freehand Drawing I	Freehand Drawing II
Sewing I	Sewing II*
Music	Music

Second Year

English III	English IV
Plane Geometry I	Plane Geom. II
Latin III	Latin IV
German III	German IV
Civics	
History III (Mediæval)	History IV* (Modern)
Botany I	Botany II*
Forging I	Forging II
Mechanical Drawing I	Mechanical Drawing II
Freehand Drawing III	Freehand Drawing IV*
Cooking I	Cooking II*
Sewing III	Sewing IV*
Commercial Arithmetic	Bookkeeping I
Stenography I	Stenography II (Including Typewriting)

Third Year

English V	English VI
Algebra III*	Business Comp. Arithmetic
	Solid Geometry
Latin V	Latin VI
German V	German VI
History V (English)	History VI* (English)
Physiography I	Physiography II*
Physics I	Physics II*
Pattern-Making I (Including Foundry)	Pattern-Making II (Including Foundry)
Mechanical Drawing III	Mechanical Drawing IV
Freehand Drawing V	Freehand Drawing VI
Cooking III	Cooking IV
Sewing V	
Bookkeeping II	Bookkeeping III
Stenography III (Including Typewriting)	Stenography IV* (Including Typewriting)

Fourth Year

Composition VII*	Composition VIII
Literature VII	Literature VIII
Trigonometry	Higher Algebra
Latin VII	Latin VIII*
German VII	German VIII*
History VII (American)	History VIII* (American)
Applied Electricity	
Chemistry I	Chemistry II*
Machine-Fitting I	Machine-Fitting II*
Mechanical Drawing V or Architectural Drawing Va	Mechanical Drawing VI* or Architectural Drawing VIa*
Freehand Drawing VII	Freehand Drawing VIII
Physiology	Hygiene and Home Nursing
Bookkeeping IV*	
Business Law	
Stenography V	

(c) *Another Middle West city* offers elaborate curricula, with required work and optionals, as follows: — A two-year teachers' preparatory curriculum; a four-year commercial curriculum; a four-year office preparatory curriculum; a four-year technical curriculum, for boys; a four-year technical curriculum, for girls; a four-year general trades curriculum; a four-year "arts" curriculum; a four-year architectural curriculum; four-year curricula in household arts, household science, and art; two-year curricula in the following,— accounting, stenography, mechanical drawing, design, pattern-making, machine shop, carpentry, electricity, household arts, printing, horticulture.

(d) The most interesting vocational school discovered is found in a modest *Massachusetts city,*— interesting because of the suggestive and skilful manner in which it enforces fundamental principles. In the first place it is interesting to find that educational guidance steadies and fortifies the new high school pupil by prescribing that in all vocational curricula, except the commercial (as well as in other high school curricula), the normal number of class-room subjects in the first year shall be three. As to vocational curricula the school authorities say: —

"While the curricula are so planned that in four years a student devotes as much time to work in English, history, civics, mathematics, and related science as would be given to this work in most high schools, it does not fit for college, but is of such a nature that it applies directly to the industry for which the curriculum is preparing. Thus the student can obtain the theory of his special line of work together with a general training which will enable him to go as far as his ability will allow in the industry he chooses. What he gains in the school will also tend to make him a more desirable citizen.

"The school day for the vocational curricula is from 8:30 to 3:15 with 30 minutes for lunch. Half of the day is devoted to shop work and the other half to the related academic or book work mentioned above. Only boys and girls who are willing to work hard are advised to elect these curricula. Pupils are advanced individually as rapidly as they are capable of promotion and those who come with excellent grammar school records will find large openings with good prospects in the industries for which the curricula train.

"When a student elects a curriculum, the related academic work, to which one-half of the time is devoted, is prescribed and must be followed unless a special request is made by the parents that a student be allowed to give all, or nearly all, of his time to shop work. This is allowed when students can remain in the school for only a year or two. In all cases, however, some mechanical drawing and the full course in mathematics are required. With the above exception, all boys have four years of English, history, civics, economics, mathematics, drawing and related science."

Mathematics, English, science, and drawing are not taught abstractly, but are correlated with the different curricula in the technical school. Each of these studies has a phase for each curriculum, so that the study is made concrete and has the clearness incident to its

special applications to the special object that the pupil is pursuing, whether machine work, electricity, pattern-making, or printing.

The shop work applicable to each curriculum is laid out with admirable appreciation of the needs of the pupils electing these different curricula.

The same general plan is followed for the household-science-and-art curricula for girls.

(e) Equally interesting is the fine arts curriculum offered in the same school. A few quotations from a descriptive booklet will show its purposes and aims.

"Fortunate is the pupil, who, at the age of thirteen of fourteen, has a peculiar natural ability for any one special line of work. If the future offers adequate financial returns for the effort expended in adult life in this profession or trade, every encouragement should be given the student to further his education in the specialty in which he promises to succeed.

"Those educators who have made it their business to study the education of the past and of the present are agreed that the high school is the place for the beginning of such specialization. There are some things which the pupil must learn in his teens, or he will never learn them. Every adult knows there are processes that now he can never learn to do well; he has passed the time in life when he can acquire certain skill, especially in using his hands.

"A study of the biographies of the notable artists and craftsmen reveals the fact that these men and women showed an inclination to work in their art or craft by the time they were twelve years of age. History repeats itself in the case of every boy or girl, who, at the time of entrance into the high school, displays more interest, pleasure, and ability in drawing than in the other studies. It is for pupils who have this love and natural ability for art work that the Fine Arts curriculum has been established in the Technical High School. It may be noted, that so far as the school authorities know, it was the first Fine Arts curriculum to be established in a high school. There are now several similar curricula in other city high schools throughout the country.

"The Fine Arts curriculum includes work in the arts, and such general education as is related to the arts. French, the language of the art world; geometry dealing with areas and shapes; history of the great art periods of the past; English as an art of expression in written and spoken forms; science dealing with the understanding of light and color, enamels, dyes, paints, etc.; biology relating to life structures; music as the most emotional of the arts; modelling in clay including designing, glazing and firing; design and applied art in copper, brass, silver, leather and textiles; freehand drawing in pencil, crayons, water colors and oil paints; out-door sketching; craftswork in wood, including the making of a studio easel, palette and paint box; a four years' course of stereopticon lectures in art appreciation; visits to galleries and art museums; and for general service in life, shop work or household

economics, civics, and if desired, German; all these make for the education of the future arts and crafts worker.

"For what life work does this curriculum prepare the students? The following list will be suggestive:

Architecture	Fashion Plate Making
Interior Decoration	Sign Painting
Advertising Design	Illustrating
Textile and Pottery Design	Lithography
Engraving	Painting
Photo-engraving	Sculpture

The Teaching of Drawing, Modelling, and Painting.

"As a preparation for these trades and professions, which generally offer liberal financial returns for the skilled artisan, and in which the supply of available labor does not equal the demand, this is the best curriculum for the student to take. Also, all students contemplating future study in any art or design school should begin such study in the high school Fine Arts curriculum."

It is particularly encouraging to find such progressive ideas combined with such sound principles of teaching as are evident in the last two examples.

(f) *Agricultural High Schools.*

Minnesota, the first State to establish this type of high school, suggests several standard curricula from which different communities may choose as best suits their individual conditions. The following will fairly illustrate the type.

FOUR-YEAR CURRICULUM IN AGRICULTURE

First Year

Botany, one-half year; eight periods per week, including laboratory.
Zoology, one-half year.
Algebra, five periods.
English, five periods.
Manual training, ten periods per week.

Second Year

Horticulture, eight periods per week, including laboratory.
Plane geometry, five periods.
English, five periods.
Manual training, ten periods.

Third Year

Soils and farm crops, eight periods per week, including laboratory.
English, five periods.
Physics, eight periods per week, including laboratory.
Farm mechanics and forge work, seven periods per week.

Fourth Year

Animal husbandry, including dairying, eight periods per week.
English, five periods.
Chemistry, eight periods per week, including laboratory.
Farm management.
Rural problems.
Farm sanitation, seven periods per week.
Civics.

Note.— This curriculum pre-supposes a course in general agriculture in the eighth grade, two periods per week, during the year.

"Animal husbandry is placed in the last year, as the pupils of this vicinity know more of the other subjects and are more interested in the garden.

"It is advisable to have students as mature as possible before taking up the breeding and feeding of farm animals, as it is a hard subject to present to immature students."

Agricultural curricula have become very common. Some of the largest city high schools include an agricultural curriculum in their program. It is a most legitimate part of the program of studies of any community. Not every high school that offers an agricultural curriculum, however, could be called an agricultural high school, which may be briefly described as one that serves a rural community and has for its center of interest its agricultural curriculum, though other curricula appear side by side with it in order to meet the varied interests of the community.

To show how far the influence of agricultural education extends and how agriculture demands and appreciates thorough education to realize its possibilities the following outline will be interesting: —

Winter Curriculum of an Agricultural High School

GENERAL STATEMENT

"The winter curricula have been planned to meet the needs of the young men and women on the farms or in town who can not avail themselves of the full high school course. Any one over fifteen years of age may enroll, but more mature students, such as those actually engaged in farm and home work, are desired. The regular work will begin at 10:15 each day and close at 2:30. Students will be given texts in most subjects and lessons assigned for home study, as all the time in school will be devoted to recitations, lectures and laboratory experiments. The general period work will be required of all. This consists of Palmer business writing, commercial spelling, chorus, rhetoricals and debate. Special classes will be given if there is sufficient demand for them. Students from the associated schools will be admitted free, but districts outside the association will be charged a fee of $2.50 per month for each pupil attending. The district pays for this, not the pupil. The regular high school faculty will have charge of the courses, so that high grade instruction is assured. Certificates will be

given for work finished at the end of each year, and those completing the four-year winter curriculum will be graduated with a diploma. With evidence of satisfactory experience on the farm, this diploma will be accepted for two years' advanced standing in the industrial curriculum of the high school. Farmers and their wives who can not be present for the entire work are especially invited to attend the lectures on such subjects as they are interested in.

First Division		*Second Division*	
First Year —	Second Year —	Third Year —	Fourth Year —
English, 5	English, 5	English, 5	English, 5
Woodwork, 5	Woodwork, 5	Iron work, 5	Cement and buildings, 5
Farm crops, 5	Animal husbandry, 5	Soils and fertilization, 5	Corn culture, 5
Practical Arith., 5	Farm accounts, 5	Farm management, 5	Farm mechanics, 5
Plain cooking, 10	Home accounts, 5	Drainage, 5	Domestic art, 10
Poultry, 5	Domestic science, 10	Sewing, 10	Political economy, 5
Writing and spelling, 5	Commercial geography, 5	Bookkeeping, 5	Civics, 5
		Business law, 5	

Business writing, spelling, rhetoricals and debate are required at the general period throughout the course.

NOTES ON THE COURSE

"It will be noticed the curriculum is divided into two divisions for economy in handling the classes. The plan is to alternate the work of the first and second years, as well as that of the third and fourth years, offering half of the subjects of a division one year and the other half the next. The numerals indicate the equivalent of single periods per week. Each student working for credit should elect twenty units per week, as this is the basis required for graduation. The first two years of English are required of all students. The rest of the work is elective except the general period."

5. **The Township High School.**— This is one of the most striking developments of secondary education in this country.

It is illustrated by the *Township High School of Illinois.* It supplies elaborate curricula equal to the best of those that have been given in the early pages of this appendix. The program of the one at hand shows eleven curricula, one commercial, two in literature and arts, one leading to engineering, one to agriculture, one to work in general science, one to medicine, veterinary surgery and dentistry, one to literary professions, and one to teaching, also one manual training and one domestic science curriculum. Two of these curricula must serve as samples here: —

LITERATURE AND ARTS

(15⅝ units required for graduation)

First Year.	*Second Year.*
Required:	Required:
English.	English.
Physiography.	Greek and Roman History.
Algebra.	Geometry.
Latin.	Latin.

Third Year.

Required:
- English.
- Modern Language.
- Physics.

Elective:
- Latin.
- Medieval and Modern History or English History.
- Algebra III and Solid Geometry or Algebra III and Trigonometry.
- Commercial Geography.
- Industrial History and Economics.
- Sewing.
- Cooking.
- Manual Training.
- Botany or Zoology.

Fourth Year.

One Required:
- English Literature or Public Speaking or College Rhetoric.

Elective:
- Latin.
- Modern Language.
- Medieval and Modern History.
- English History.
- American History.
- Algebra III and Solid Geometry or Algebra III and Trigonometry or Trigonometry and Surveying.
- Botany.
- Zoology.
- Chemistry.
- Industrial History and Economics.
- Civics and Commercial Law.
- Sewing.
- Cooking.
- Manual Training.
- Advanced Physics.
- Astronomy.
- Roman Life.
- American Literature.
- One unit of music may be allowed.

MANUAL TRAINING

First Year.

Required:
- English.
- Industrial Science.
- Manual Training.

Elective:
- General Mathematics.
- Algebra.

Second Year.

Required:
- English.
- Physics.
- Manual Training.

Elective:
- Foreign Language.
- Greek and Roman History.
- Medieval and Modern History.
- Geometry.*
- General Mathematics.

Third Year.

Required:
- English.
- Manual Training.
- Chemistry.

Elective:
- Industrial History and Economics.
- Medieval and Modern History.
- English History.
- Language.
- Algebra III and Solid Geometry.
- Arts and Crafts.
- Machine Designing.
- Architectural Designing.

*If Algebra is selected, geometry is the first mathematical sequence allowed.

Fourth Year.

Required:
Manual Training.
Elective:
English.
Electrical Construction.
Foreign Language.
Public Speaking.
English History.
American History.
American Literature.
Civics and Commercial Law.
Algebra III and Solid Geometry.
Trigonometry and Surveying.
Arts and Crafts.
Machine Designing.
Architectural Designing.

Quotations from Stanley Brown, Principal of the Joliet Township High School will be of interest [14]: —

"The most distinctive feature (of the Township High School) is that the entire power to establish or disestablish, to bond, to build, to create the board, etc., etc., is lodged in the local community. So far as my information goes there is no other type of public educational institution that receives absolutely no financial support from the state, and in consequence the township high school of Illinois is the most purely democratic institution known to the writer."

"To most people unfamiliar with the township high school law of Illinois, the primary conception of such a school locates it in the heart of a rural community and thinks of it as applying only to rural communities, but its main application in Illinois has been found of greatest value in villages and towns whose location made it possible for them to act as the center of community life, even though their population was but a few hundred or a few thousand people."

"There is no limit in either direction to the amount or character of work which may be done in a township high school, and so one may find on investigation that the courses of study vary from two years to six years and include both high school, normal school and college work. There seems to be no reason at present, if a community so elects, to prevent the successful completion of one or two years of work ordinarily offered by the college or the normal school. Such advanced courses are now being given by some of the township high schools in Illinois and that with such success as to secure without examination or condition the same credit in college and university which similar courses would receive if the student had taken them in the college or university instead of the high school."

"The township high school is a system by itself and is, in consequence, free from many of the disturbing factors incident to municipal control of schools. Neither the mayor of the city, the city council, the ward politician, nor any official of the municipality may interfere with the development of the township high school."

"The records of the township high schools in Illinois show that both the tenure of office of the superintendent or principal of the school and that of the board of education controlling it are much longer than

[14] Extracts from his "Township High Schools of Illinois."

the tenure of office of either city superintendent or principal of city high school or city boards of education."

"It is fairly certain that no other type of high school in any state of the union in either city or town has at its command sufficient funds to pay the superintendent, principal and teachers as well as do the best township high schools of Illinois."

"It is not only possible but it is a well known fact that many of the township high schools are equipped with apparatus, libraries, museums, etc., etc., very much better than most of the small colleges and as well as some of the universities. When a school is able to expend eighteen thousand dollars for apparatus, etc., to equip laboratories, there need be no hesitation in arranging advanced courses in science."

"The extent, amount and character of work done by the best township high schools of Illinois give them a higher classification in the educational system than belongs to any other type of high school in any state. The work accomplished by technical institutions, privately endowed and extending over six years beyond the elementary school course is not very different from that of the best township high schools in Illinois. In so far as the first two years' work ordinarily offered by the small college or the university is done by the township high school, in such particular it belongs to the collegiate classification."

"The organization of the township high school has been a great boon to the elementary school, because the taxes which supported both systems before the enactment of the township law are now used exclusively for the support of the elementary school. The township school depends on the township as a unit with all the corporate interests located therein to furnish the funds for its support, and in no case has the taxing limit for its support been reached."

"The state gives no support and has absolutely no authority in the management of this school."

"There are already eighty of these Township High Schools in Illinois, and the number is growing."

"The *Joliet Township High School,* Joliet, Illinois, enrolls eighteen hundred students and includes day, afternoon, evening, and vacation schools. Eighty-five per cent. of all who complete the eighth grade in the city enter the high school; sixty per cent. of those who enter the high school graduate from a four-year curriculum; fifty per cent. of all who graduate enter some higher institution of learning. This institution, supported entirely by local taxation and managed entirely through local control, includes four years of high school work beyond the eighth grade, one year of State Normal School work with practice teaching for graduates of the school, and two years of college work for graduates of the school."

"The institution is now ranked by the State University of Illinois as a Junior College, and its graduates recommended receive the same treatment as students coming from a college or university."

The LaSalle-Peru Township High School already has a group of five

buildings. Its Principal, Thomas J. McCormack, has this to say as to the distinguishing characteristics of such schools: —

"They are much misunderstood, especially by the people in the East. Our state law enables the people of any congressional township (six miles by six miles square) to establish a township high school in addition to and above the regular school systems already established. It is mainly a device for doubling the taxation powers of our school systems. For example, our township high school board can tax the property of our entire township as much as the boards of the three individual cities composing the township can tax the said property. If we had no township high school in our little tri-cities, each city would be compelled to support a high school with the same funds with which it is now supporting its grade schools; and when you reflect that the grade schools have barely enough money to operate themselves decently by modern methods, you will understand the main advantage of the township High School. It is to be remembered furthermore that township high schools are not limited to the country, but in fact flourish in their greatest strength in the medium sized cities. The regular high school of Joliet, for instance, a city of fifty or sixty thousand, is a township high school."

"We draw from as large a territory as interurban lines of transportation reach and until we touch the zone of another high school district. For example, we have good connections at La Salle East and West, and consequently we draw from territory within fifteen miles on each side of us. Our attendance north and south is limited by the fact that there are no interurban connections, but only steam railway connections. Again twenty miles east of us at Ottawa is a large township high school, and five and twenty miles respectively west of us are two large township high school."

6. **State schools —**

Most of the foregoing curricula are local applications of the high school idea. That they represent the general trend is indicated by the fact that states prescribe the general type which may be deduced from these local curricula for all high schools within their borders.

(a) *A Middle West State.*

STATE REGULATIONS

"Every four-year curriculum shall contain at least fourteen year units of work. Unless for satisfactory special reasons exceptions are allowed, the following units of work should be found in every curriculum (a unit of work to mean one year's work of one period a day, or 180 or more recitations). Recitation periods should be not less than 35 minutes in length and a longer period is desirable.

"I. Mathematics ..... 2 units.
"II. English: —
(Includes literature, literary readings, composition, grammar and rhetoric) ..... 2 units.

"III. Science: —
(*a*) Physics or chemistry, *elementary science.
(b) Any one of the following sciences, or a combination of not more than two of them,— botany, zoology, physiology, physical geography, 1 unit 2 units.

"IV. History: —
(*a*) United States history, including history of the constitution, 1 unit.
(*b*) Ancient history, or ancient and medieval, or medieval and modern and English history, 1 unit 2 units.

"V. In general curricula offering less than four years of work in a foreign language, there must be at least three units of work in English, and two and one-half units in history."

"MAXIMUM AND MINIMUM TIME LIMITS

"1. No subject, as a general rule, should be offered for a less time than one-half year. Algebra and geometry should never be required for a period to exceed one year each.
"2. Not less than two years of any foreign language should be offered.
"3. The maximum time for history shall be three years, or four years including civics and economics. Where instruction in American history in the elementary schools is strong, it is advisable to have United States history follow rather than precede European history.
"4. Civics and economics not to exceed one-half year each.
"5. Teachers in all branches of study will be held responsible for results in English, and all teachers of composition and literature are urged to make an especial effort to improve the administration of this work."

"The following general type curriculum including manual training and domestic science presents a specific application of the preceding principles and is given as a suggestive basis for the formation of new curricula. With slight variation it has been very widely adopted in the state. While it is desirable that there shall be a large degree of uniformity in the high school curricula of the state yet reasonable variation will be approved and it is neither intended to arbitrarily fix the place of the different subjects nor to discourage the adaptation of high school work to manifest local needs. Special curricula are made by combining special subjects with the type curriculum."

FIRST YEAR

First Semester	*Second Semester*
Required Units	
English.	English.
Algebra.	Algebra.

*Elementary science should mainly consist of elementary physics and chemistry.

First Semester	*Second Semester*
Elect Two Units	
Elementary Science.	Elementary Science.
Latin.	Latin.
Spelling, Penmanship, etc.	Botany.
Manual Training or Domestic Science.	Manual Training or Domestic Science.
	Composition, Business Forms, etc.

SECOND YEAR

Required Units	
Ancient History.	Ancient History.
English.	English.
Elect Two Units	
Arithmetic.	Physiology.
Botany.	Latin.
Latin.	Bookkeeping.
Manual Training or Domestic Science.	Manual Training or Domestic Science.
Zoology.	Geography.

THIRD YEAR

Required Units	
Geometry.	Geometry.
Medieval History.	English History.
Elect Two Units	
English.	English.
German.	German.
Latin.	Latin.
Citizenship.	Grammar.
Bookkeeping.	Economics.
Physical Geography.	Chemistry.
Chemistry.	

(b) *A State in the Far West.*

FIRST CLASS (FOUR-YEAR) HIGH SCHOOL

Shall have a curriculum requiring fifteen units:

Seven specified units:

Three units English.

Two units mathematics.

One unit social science, including history.

One unit natural science.

Two additional academic units:

One or both of these units shall be advanced work to meet the requirements of a second major of three units.

Six elective units:

Two units foreign language. Note: Students desiring to make a major in foreign language will apply one of the additional academic units to foreign language.

Four elective units to be used for whatever work best meets the needs of the individual.

7. **Small towns and villages.**— Even small towns and villages, with their limited means, are following the same trends. Naturally the same wealth of curricula and options cannot be supplied, but the same spirit is there.

(a) *A New England town* of less than five hundred families, with no state aid such as many such towns receive, because its valuation was higher than that established for drawing such aid.

A High School of 4 Teachers and 64 Pupils Curriculum

General	*Agricultural*	*Commercial*
English 1	English 1	English 1
Algebra	Agriculture	Bookkeeping
German	Bookkeeping	Com. Arith.
Phys. Geog. } Select 3	German	Phys. Geog.
Com. Arith.	Algebra } Select 1	or German
	Phys. Geog.	
English 2	English 2	English 2
Plane Geom.	Plane Geom.	Bookkeeping 2
German	Agriculture	Hist. 1
Biology } Select 3	German } Select 3	Sten. and Type. } Select 2
Hist. 1	Hist. 1	German
Typewriting	Biology	Biology
English 3	English 3	English 3
Algebra 3 (half year)	Agr. Physics	Sten. and Type. 2
German } Select 3	German	German
Physics	Hist. 2 } Select 2	Physics } Select 2
Hist. 2	Algebra (half year)	Hist. 2
	Type.	
English 4	English 4	English 4
Trig. and Adv. Alg.	Agr. Chem.	Bus. Prac.
Chemistry } Select 3	Amer. Hist.	Amer. Hist.
Amer. Hist.	Economics	Chemistry } Select 3
Economics		German
		Economics

Specials (Elective)

Public Speaking .....Soph., Jr., and Sr.
Manual Training .....Fresh., Soph., Jr., and Sr.
Mechanical Drawing .....Soph., Jr., and Sr.
Beginning Design or Sketching .....Fresh., Soph., Jr., and Sr.
Sewing .....Fresh.

COLLEGE PREPARATORY

Classical

First Year

English
Latin
Algebra
Ancient Hist.

Second Year

English
Latin
German
Plane Geometry

Third Year

English
Latin
German
Algebra (half year)
Physics or Eng. Hist.

Fourth Year

English
Latin
Advanced Algebra (half year)
Chemistry
American History

Scientific

First Year

English
German
Algebra
Ancient Hist.

Second Year

English
German
Plane Geometry
Biology

Third Year

English
German
Algebra and Solid Geometry
Physics or Eng. Hist.

Fourth Year

English
Trig. and Adv. Alg.
Chemistry
American History

SPECIALS (ELECTIVE)

Public Speaking	Soph., Jr., and Sr.
Manual Training	Fresh., Soph., Jr., and Sr.
Mechanical Drawing	Soph., Jr., and Sr.
Beginning Design or Sketching	Fresh., Soph., Jr., and Sr.
Sewing	Fresh.

(b) *A "Mining Camp" High School* offers three curricula,—college preparatory, commercial, and scientific, with elective privileges.

(c) *A High School in a town that has risen from a Western desert* has three business curricula, two and three years in length, besides evening courses, and two four-year curricula, Latin scientific and Scientific, with elective privileges.

(d) *A New England High School in a village of 6000, serving also as high school center* for near-by rural townships. (Through a provision of school law such townships may pay the expenses of secondary pupils at neighboring high schools, instead of maintaining such schools themselves,—not an entirely satisfactory arrangement from several view-points, but a workable one.) This school offers college preparatory, scientific preparatory, general, commercial, domestic arts, and mechanic arts curricula, with elective privileges.

(e) *A town in a Middle Atlantic State.*

	Required *	Elective * *Classical*	Elective *Technical*	Elective *Commercial*	Elective (Boys) *Practical Arts, Just Started Tentatively*	Elective (Girls) *Practical Arts, Just Started Tentatively*
I	5 English I 5 Algebra I 3 General Science 2 Civics	5 Latin I	5 1st Mod. Lang. I	5 Bus. Arith. and Book K. 1 Mech. Drawing	5 Bus. Arith. and Book K. I 1 Mech. Drawing	5 Bus. Arith. and Book K. I 1 Drawing (Design)
II	5 English II 5 Plane Geometry	5 Latin II 5 2d For. Lang. I	5 1st Mod. Lang. II 5 2d Mod. Lang. I	5 Book K. II 3 Stenog. II 2 Type. I	4 Shop Work 1 Mech. Drawing 5 Book K. II	5 Book K. II 2 Sewing 2 Cooking 1 Drawing (Design)
III	3 English III	5 Latin III or IV 5 2d For. Lang. II 5 3d For. Lang. I 5 Ancient Hist.	5 2d Mod. Lang. II 5 Sol. Geom. and Trig. 5 Chem. or Physics 5 Med. and Mod. Hist.	5 Book K. III and Com. Law 5 Stenog. II and Bus. Eng. 5 Type. II 5 Med. Hist.	5 Chem. or Physics 4 Shop Work 2 Mech. Drawing 5 Med. and Mod. Hist.	5 Med. and Mod. Hist. 3 Household Economics,—Serving Meals, Food Values, Laundering 5 Chemistry 2 Dressmaking 1 Drawing 1 Millinery
IV	3 English IV 5 U. S. Hist. and Civ.	5 Latin IV or III 5 2d For. Lang. III 5 3d For. Lang. II 5 Rev. Math. with Adv. Alg.	5 2d Mod. Lang. III 5 Physics or Chem. 3 Rev. Math. 5 First Mod. Lang. III	5 Stenog. III and Office Practice 10 Type. III	5 Physics or Chem. 2 Drawing (Plans, Blue Prints, etc.)	4 Household Economics,—Sanitation House Management Home Nursing 2 Dressmaking 2 Millinery 2 Drawing

* It is to be supposed that a pupil is required to take four units of work each year.

8. **What a great Cosmopolitan High School can do.**—(a) *A Pacific Coast School. Twelve Curricula.*

College Preparatory (1)

9 B	1 English 2 Algebra 3 Latin, Spanish, French, German 4 Gen. Sci. (2), Greek History, Harmony, Sewing (2), Art (2), Carpentry (2) 5 Oral Expression 6 Gymnasium
9 A	1 English 2 Algebra 3 Latin, Spanish, French, German 4 Gen. Sci. (2), Roman History, Harmony, Sewing (2), Art (2), Cabinet Work and Turning (2) 5 Oral Expression 6 Gymnasium
10 B	1 English 2 Geometry 3 Latin, Spanish, French, German 4 Botany (2), European History, Harmony, Bookkeeping (2), Cooking (2), *Geometric Drawing (2), Forge 5 Oral Expression 6 Gymnasium
10 A	1 English 2 Geometry 3 Latin, Spanish, French, German 4 Botany (2), European History, Harmony, Bookkeeping (2), Cooking (2), *Geometric Drawing (2), Pipe-fitting (2) 5 Oral Expression 6 Gymnasium
11 B	1 English 2 Latin, German, French, Spanish 3 American History and Civics 4 A Language, Advanced Algebra, Chemistry (2), History of Music, **Horticulture (2), Dressmaking and Milinery (2), Stenography and Typewriting 5 Oral Expression 6 Gymnasium
11 A	Same as B 11, except Oral Expression (optional)
12 B	1 English, Latin, German, French, Spanish 2 Industrial History and Economics, Physiology and Hygiene (2) 3 Physics (2), Chemistry (2) 4 A Language, Solid Geometry and Trigonometry, History of Music, Machine Shop (2), Pottery and Metal Work (2), Agriculture (2), Dramatics (optional)
12 A	Same as B 12

College Preparatory (2)

9 B	English (Required) Algebra Ancient History Art (2) Wood-working (2) Sewing (2) Harmony Latin, French, German Spanish General Science (2) Oral Expression (required) Gymnasium (required)
9 A	Same at B 9
10 B	English European History Harmony Latin, French, German Spanish Botany (2) Biology (2) Geometry Bookkeeping (2) Geometric Drawing (2) Cooking (2) Forge Oral Expression (required) Gymnasium (required)
10 A	Same as B 10
11 B	English (required) American History and Civics Advanced Algebra Latin, German, French, Spanish Chemistry (2) Stenography and Typewriting History of Music Horticulture (2) Oral Expression (required) Gymnasium (required)
11 A	Same as B 11, except Oral Expression (optional)
12 B	English Industrial History and Economics Solid Geometry and Trigonometry History of Music Spanish, French Latin, German Machine Shop (2) Physics (2) Agriculture Dietetics Dramatics (optional)
12 A	Same as B 12

Four subjects required each year in second preparatory curriculum.

* Free-hand Drawing necessary for University credit.

** Botany should precede this course.

College Preparatory (3), Genl.

9 B	1 English 2 Latin 3 Algebra 4 French, German General Science (2) Ancient History 5 Oral Expression 6 Gymnasium
9 A	Same as B 9
10 B	1 English 2 Latin 3 Geometry 4 French, German Botany (2) European History 5 Oral Expression 6 Gymnasium
10 A	Same as B 10
11 B	1 English 2 Latin 3 German, French 4 Chemistry (2), Advanced Algebra, American History and Civics 5 Oral Expression 6 Gymnasium
11 A	Same as B 11, except Oral Expression (optional)
12 B	1 Latin 2 German, French 3 Physics (2), Chemistry (2) 4 English, Solid Geometry and Trigonometry Dramatics (optional)
12 A	Same as B 12
	Note — At least one year of History must be elected.

Engineering School Preparatory Curriculum

9 B	1 English 2 Algebra 3 Latin, Ancient History 4 French, German, Woodworking (2) Art (optional) (2) 5 Oral Expression 6 Gymnasium
9 A	Same as B 9
10 B	1 English 2 Geometry 3 Latin, European History 4 French, German Mechanical Drawing (2) Botany (optional) (2) 5 Oral Expression 6 Gymnasium
10 A	Same as B 10
11 B	1 English, Latin 2 Advanced Algebra 3 Chemistry (2), American History and Civics 4 German, French Adv. Mechanical Drawing (optional) (2) 5 Oral Expression 6 Gymnasium
11 A	Same as B 11, except Oral Expression (optional)
12 B	1 English, Latin 2 German, French 3 Physics (2) 4 Solid Geometry and Trigonometry Dramatics (optional)
12 A	Same as B 12
	Note: Those who elect Latin the third year must elect third year English the fourth year. One year of history must be elected.

A Pacific Coast School (Continued).

Scientific Curriculum

9 B	1 English 2 Algebra 3 General Science (2) 4 Latin, French, German, Ancient History, Woodworking (2), Sewing (2), Harmony, Art (2) 5 Oral Expression 6 Gymnasium
9 A	Same as B 9
10 B	1 English 2 Geometry 3 Botany (2), Biology (2) 4 Latin, French, German, European History, Harmony, Mechanical Drawing (2) 5 Oral Expression 6 Gymnasium
10 A	Same as B 10
11 B	1 English 2 Chemistry (2) 3 Latin, German, French, American History and Civics, Advanced Mechanical Drawing (2) 4 Advanced Algebra, Horticulture (2), History of Music 5 Oral Expression 6 Gymnasium
11 A	Same as B 11, except Oral Expression (optional)
12 B	1 English, Latin, French, German 2 Physics (2), Advanced Chemistry (2) Industrial History and Economics, Physiology and Hygiene (2) 4 English, Solid Geometry and Trigonometry, History of Music, Agriculture (2), Dramatics (optional)
12 A	Same as B 12

English Curriculum

9 B	1 English 2 Algebra 3 Ancient History, Woodworking (2), Sewing (2), Art (2) 4 General Science, Harmony 5 Oral Expression 6 Gymnasium
9 A	Same as B 9
10 B	1 English 2 European History, Harmony 3 Botany (2), Biology, Art (2) Mechanical Drawing (2) 4 Geometry, Bookkeeping (2) 5 Oral Expression 6 Gymnasium
10 A	Same as B 10
11 B	1 English 2 Chemistry (2), Advanced Algebra 3 American History and Civics 4 Machine Drawing (2), History of Music, Craft (stenciling, block-printing and leather work) (2) 5 Oral Expression 6 Gymnasium
11 A	1 English 2 Chemistry (2), Advanced Algebra 3 American History and Civics 4 Architectural Drawing (2), History of Music, Textile Handicraft (2) 5 Oral Expression (optional) 6 Gymnasium
12 B	1 English 2 Physics (2) Physiology and Hygiene (2) 3 Industrial History and Economics 4 Solid Geometry, History of Music, Pottery (2) Dramatics (optional)
12 A	1 English 2 Physics (2), Physiology and Hygiene (2) 3 Industrial History and Economics 4 Trigonometry History of Music Metal Work (2) Dramatics (optional)

Commercial Curriculum		Language and Music	
9 B	1 English 2 Commercial Arithmetic 3 Spelling and Penmanship 4 Spanish, French, German, Art (2), Harmony, General Science (2), Ancient History, Sewing (2), Wood-working (2) 5 Oral Expression 6 Gymnasium	1 English 2 Harmony 3 Latin, French, German, Spanish 4 Algebra, General Science (2), Ancient History 5 Oral Expression 6 Gymnasium	**9 B**
9 A	Same as B 9	Same as B 9	**9 A**
10 B	1 English 2 Bookkeeping (2) 3 European History, Biology (2), Harmony, Cooking (2) 4 Business Correspondence, Spanish, French, German 5 Oral Expression 6 Gymnasium	1 English 2 Harmony 3 Latin, French, German, Spanish 4 Geometry, European History, Biology (2) 5 Oral Expression 6 Gymnasium	**10 B**
10 A	Same as B 10	Same as B 10	**10 A**
11 B	1 English 2 Bookkeeping (2) 3 Stenography and Typewriting 4 American History and Civics 5 Oral Expression 6 Gymnasium	1 English 2 History of Music 3 Latin, German, French, Spanish 4 American History and Civics, A Foreign Language 5 Oral Expression 6 Gymnasium	**11 B**
11 A	Same as B 11, except Oral Expression (optional)	Same as B 11, except Oral Expression optional	**11 A**
12 B	1 English 2 Commercial Law 3 Chemistry (2), History of Music, Physiology and Hygiene (2) 4 Stenography and Typewriting (2) Dramatics (optional)	1 English 2 History of Music 3 Latin, German, French, Spanish 4 Industrial History and Economics A Foreign Language Dramatics (optional)	**12 B**
12 A	Same at B 12	Same as B 12	**12 A**

A Pacific Coast School (Continued).

Home Economics		Art Curriculum	
9 B	1 English 2 Sewing (2) 3 Art (2), Ancient History (2), Algebra 4 Latin, Spanish, French, German, General Science, Harmony 5 Oral Expression 6 Gymnasium	1 English 2 Art (2) 3 Harmony, Ancient History, Algebra 4 Latin, Spanish, French, German, Gen. Sci. (2), Sewing (2) 5 Oral Expression 6 Gymnasium	**9 B**
9 A	Same as B 9	Same as B 9	**9 A**
10 B	1 English 2 Cooking (2) 3 Art (2), Biology (2), Geometry 4 Latin, Spanish, French, German, European History, Harmony 5 Oral Expression 6 Gymnasium	1 English 2 Art (2) 3 Harmony, European History, Geometry 4 Mechanical Drawing, Latin, Spanish, French, German, Botany (2), Biology (2) Cooking (2) 5 Oral Expression 6 Gymnasium	**10 B**
10 A	Same as B 10	Same as B 10	**10 A**
11 B	1 English 2 Dressmaking and Millinery (2) 3 Domestic Chemistry (2) 4 Household Management and Laundry, Craft (Stenciling, block printing and leather work) (2), History of Music, A Foreign Language, American History and Civics 5 Oral Expression 6 Gymnasium	1 English 2 Art (2) 3 Craft (Stencling, Block Printing and Leather Work) (2), American History and Civics 4 Machine Drawing (2), History of Music, Latin, Spanish, French, German, Chemistry (2) 5 Oral Expression 6 Gymnasium	**11 B**
11 A	1 English 2 Dressmaking & Millinery (2) 3 Domestic Chemistry (2) 4 Household Management and Laundry, Textile Handicrafts (2), History of Music, A Foreign Language, American History and Civics 5 Oral Expression (optional) 6 Gymnasium	1 English (2), Art (2) 3 Textile Handicrafts (2) American History and Civics 4 Architectural Drawing (2), History of Music, Latin, Spanish, French, German, Chemistry (2) 5 Oral Expression (optional) 6 Gymnasium	**11 A**
12 B	1 A Language, Pottery (2) 2 Advanced Cookery (2) 3 Tailoring (2), History of Music, Industrial History and Economics 4 Home Architecture and Sanitation (2), Physiology and Hygiene (2) Dramatics (optional)	1 A Language 2 Art (2) 3 History of Music Industrial History and Economics 4 Pottery (2) Home Architecture and Sanitation and Furnishing (2) Dramatics (optional)	**12 B**
12 A	1 A Language, Metal Work (2) 2 Dietetics (2) 3 Sewing and Design (2), History of Music Industrial History and Economics 4 Art Photography (2) Physiology and Hygiene (2)	1 A Language 2 Art (2) 3 History of Music Industrial History and Economics 4 Metal Work (2) Art Photography (2) Dramatics (optional)	**12 A**

Mechanic Arts	
9 B	1 English 2 Wood-working (2) 3 Algebra, Commercial Arithmetic 4 Art (2), Gen. Sci. (2), Spanish 5 Oral Expression 6 Gymnasium
9 A	Same as B 9
10 B	1 English 2 Foundry (2) 3 Geometry, Spanish, Economic Geography 4 Mechanical Drawing (2), Botany (2), Biology (2), Bookkeeping (2) 5 Oral Expression 6 Gymnasium
10 A	1 English 2 Pattern-making (2) 3 Geometry, Spanish 4 Mechanical Drawing (2) Botany (2) Bookkeeping (2) 5 Oral Expression 6 Gymnasium
11 B	1 English 2 Foundry and Pattern-making (2), Automobile Repairing (2) 3 American History and Civics 4 Advanced Mechanical Drawing (2), Chemistry (2), Advanced Algebra, Spanish, Horticulture (2) 5 Oral Expression 6 Gymnasium
11 A	Same as B 11
12 B	1 English, Spanish, Solid Geometry and Trigonometry 2 Physics (2) 3 Machine Shop (2) 4 Industrial History and Economics, Physiology and Hygiene (2) Dramatics (optional)
12 A	Same at B 12

Agriculture	
9 B	1 English 2 Woodworking (2) 3 Gen. Sci. (2), Spanish 4 Commercial Arithmetic 5 Oral Expression 6 Gymnasium
9 A	Same as B 9
10 B	1 English 2 Botany (2) 3 Mechanical Drawing (2), Bookkeeping (2) 4 Geometry, Foundry, Pattern Making (2) Spanish 5 Oral Expression 6 Gymnasium
10 A	Same as B 10
11 B	1 English 2 Horticulture (2) 3 American History and Civics 4 Forge and Pipe Fitting (2), Chemistry (2), Spanish, Automobile Repairing (2) 5 Oral Expression 6 Gymnasium
11 A	Same as B 11, except Oral Expression (optional)
12 B	1 English, Solid Geometry and Trigonometry, Spanish 2 Agriculture (2), Physiology and Hygiene (2) 3 Industrial History and Economics 4 Physics (2) Dramatics optional
12 A	Same as B 12

A Pacific Coast School (Concluded).

General Notes: Oral Expression and Gymnasium require two hours per week. All other subjects have daily recitations and receive full credit. Subjects requiring more than one period per day are followed by numbers in parentheses. *One subject under each numeral must be taken, except in college preparatory curriculum (2), in which four subjects are required each year.*

Collegiate Work: 13th and 14th Year Curricula.

English:
- Composition — Narration, Description, Exposition
- Chronological Study of English Literature by Types

Mathematics:
- Solid Geometry
- Trigonometry
- College Algebra
- Calculus, differential, integral
- Analytical Geometry

German:
- Elementary German
- Advanced
- Literature

French:
- Elementary
- Advanced
- Literature

History:
- History of the U. S. Territorial Growth *
- History of the Last Century

Social Sciences:
- Introduction to Social Science*
- Psychology, elementary
- Logic, deductive
- Advanced Economics *
- Parliamentary Government in Europe and America

Natural Sciences:
- Physics of the Home. Bacteriology of the Home
- General Botany
- Chemistry:
  - Qualitative Analysis
  - ——— Quantitative Analysis

*Given alternate years not in 1915–1916.

(b) *A Second High School* in the same city offers seventeen curricula,— commerce, home economics, electrical engineering, mining engineering, civil engineering, art, mechanical draughting, architecture, music, industrial, dressmaking and millinery, chemistry, mechanical engineering, general elective, college preparatory (two different curricula), journalism.

These schools give a vivid idea of the splendid service rendered by great cosmopolitan high schools. At the same time, with eight other high schools in the same city offering various curricula ranging in number from three to eleven, besides several Junior High Schools providing six curricula, they bring into sharp relief the result of the nineteenth century tendency to scatter high schools and high school administration, with the consequent financial loss and loss in mutual cooperation, appreciation and civic unity. In contrast with this the twentieth century is to tend toward greater concentration and higher educational efficiency.

XXIV

THE HIGH SCHOOL OF THE TWENTIETH CENTURY,— PRINCIPLES AND METHOD

Study-content,— more important than the curriculum.— But study-content is more important than the formal curriculum. It is this that makes the real curriculum. The twentieth century high school is to adapt the content of studies more carefully to the qualities of the adolescent, both physical and psychical. This is not an abstract matter to be settled by the apparent demands of the studies themselves. Technical and professional education is not aided by assigning to the adolescent a kind of instruction and technique for which he is not fitted, or for which he has, at that stage, a natural repugnance. There is adolescent material in every subject, and there is infinite scope for the selection of material of this type. The curriculum itself is meaningless form. Choice of content and manner of presentation give it vitality and validity. It is here that we touch the individual. In this sense only is the curriculum a part of school environment. In this sense it becomes the most important part of that environment. It is through this selective process that the school promotes physical, intellectual, and moral health, and brings to bear upon the pupil forms and forces that relate themselves readily to adolescent characteristics. It is through this that the high school trues all its educational material and processes to its opportunities and just ends, giving clear vision, inspiring high endeavor, and inculcating ideas of public service.

Some principles to be used in determining study-content.— The great purpose of secondary education is to give the adolescent an adolescent's knowledge and appreciation of the choicest treasures in the experience of the race, and to initiate him into citizenship. This involves an intelligent grasp of his special vocation, when the secondary school is his "finishing

school." This is true historically, and it accords with the psychology and pedagogy of the period. Applied to present-day education it means that the secondary period is a time for inducting into great subjects, for developing great interests, for settling the guiding habits of life, intellectual, physical, social, and religious.

From the point of view of instruction the main point is to lead a pupil to love a subject. We must strike directly at his interests and build systematically from this point. Dominant interests in the pupil and point of attack in the subject must coincide. Details that the ten-year-old relishes or at least masters with a good grace, and the finesse and technique that appeal to the older student find no marked favor with the adolescent. The larger ideas, whose meaning and suggestiveness are more evident, are for him. We sometimes so pervert order that we repel from a subject when we might attract.

Language study as an example.— To be more specific, formwork and drill in Latin should come in the pre-pubertal period. The kind of work often provided for the adolescent,— work in which a boy of nine or ten might be content and even enthusiastic,— repels the high school student, and doubtless explains in a measure the partial dissolution of Latin classes as they finish the first term's work.[1] Latin is a very useful study, if conducted so as to realize its utility. In the coming high school content and method will be such as to adequately reward the pupils who elect it. In language study generally, whether we are concerned with English or with some foreign language, the adolescent should be occupied, on the grammatical side, with some of the larger ideas of grammar that afford stimulating and inspiring application of intellectual muscle. Such application may be made, particularly in the direction of self-expression, or composition, which should have a splendid growth at this age if rightly managed. On the other hand, he should be led to love literature and get something of its spirit. Clouston says that now for the first time comes any real appreciation of literature. The study of literature in the high school, therefore, should take hold of this rising adolescent quality. The in-

[1] See articles by G. S. Hall and E. B. Bryan in Ped. Sem., Vols 7 and 9.

tensive study of pieces, as such, is a mistake psychologically and linguistically.[2]

Science as an example.— Again the mastery of the common facts of science, as facts, comes in the elementary school. A new order of objective work to meet the new power of observation that is dawning, and especially the study of processes, of meanings, and of relations, the stimulation of great laws, and the inspiration of the lives of great scientists fit the nature of the adolescent and will mark the twentieth century study of elementary science in the high school.[3] As in literature, we too often expect the pupil to occupy himself with fine details, dry and abstract discussions of what are supposed to be preliminaries of the subject, and patient investigation.

In suggesting adolescent material in these subjects hints have been given as to the perversion of order and the lack of pedagogical judgment that have been too common in laying out these high school courses. The same conditions may be found in other subjects. It is not possible to follow the logical order as laid down in a systematic treatise on a subject. Another kind of logic rules. The elements of a subject found in a treatise, or in a reduced copy of a treatise,— the logically arranged text-book,— do not, at least as ordinarily conceived, represent adolescent educational material. Such material must be culled and arranged in an order adapted to the growth of the pupil. Material not found in the book must be used to supplement the book. Introductory lessons must be revised and improved and related to the secondary period.

New text-books.— The high school is to have new text-books made on a different plan. But, more important than this, the text-book is to occupy its legitimate place and serve merely as a secondary agency. The pupil's first work in a subject or

[2] This, however, does not mean that some pieces may not be read with considerable reference to detail (of a sort applicable to the age), so that the pupil may get a suggestive plan for reading, and get it as concretely as possible. Most of the intensive reading, however, as now conducted, is not for this purpose. The meaning of it all is this, that the main aim should be adolescent appreciation of literature, not finesse.

[3] See G. S. Hall in Ped. Sem. Note here the reorganization of science in the Mass. High Schools, Rept. of Mass. Board of Education, 1912–13, pp. 103, 136, and the reorganization of high school mathematics.

topic is to be direct, rather than indirect through some book. This makes it possible for the book to fulfil its larger function as a means of stimulating study and reference supplementary to the direct work. Again a subject cannot be divided into sections longitudinally or latitudinally, one for the secondary school, one for the college. Such a relation of schools does not exist, or does not exist in such a form.

High school period a selective one.— The secondary period, looked at from all points of view, is a peculiarly selective one. Right selection secures interest. When once the pupil is securely interested in a subject, the abstract organization of parts into a logical whole will come in a more natural way than when forced prematurely, and will come all the better because of the firm hold which the subject has upon him. He has a logical order quite as good as the other, and, what is of more moment here, much better adapted to him. We have tried to be logical in the wrong way. Probably less has been done on this phase of pedagogy than on any other. It furnishes a great field for investigation and study; for the kind of educational material and the kind of relations are matters of peculiar concern in an adolescent school. Administrators of the twentieth century high school are to occupy this field and adjust the secondary school to its duties and opportunities by a truer educational selection.

So much has been said as to the study side of the high school because it has occupied and continues to occupy the forefront of attention and has absorbed most of the effort of the school. It is an instinctive concession to a deep seated prejudice. In reality the program of studies will be a minor part of the twentieth century high school. The principles of selection that apply to it, however, apply also to all the other influences of the school, social and intellectual, some of the most important of which are to be considered in the latter part of this chapter and in the next.

The new high school as a factor in the revision of the elementary program.— In this adjustment of the program of studies and of content it will be feasible to render a very distinct and long-needed service to the elementary school. Its curriculum and curriculum-relations need readjustment quite as much

as any part of the secondary school. At present our elementary grades are literally lumbered with study material that is not merely extraneous to its just purposes, but is needed in the higher schools. Much of grade geography, as at present outlined, belongs in the high school, not merely because it is a confusing element in the grades and not suited to the development of grade pupils, but because it is peculiarly germane to high school aims and purposes. This is true also of a part of history, truer of a substantial portion of arithmetic, and truer still of grammar.[4] The past inconsiderate exploitation of the curriculum of the grades has caused some of the most serious school problems, and has given rise to some of the most serious criticism of the present day.

Some things the high school will take from the elementary school.— The twentieth century high school will have a broad course in geography in its science group, not a review, but a true cultural and scientific course. This will relieve the grades of some of their present over-load. Different departments of the high school will have a strong technical course in arithmetic, and there will probably be a good general course in the subject. This will relieve the grades of much misplaced effort incident to attempting work beyond the experience and thought-power of grade pupils, and will secure a substantial foundation for the mathematical work of the technical departments of the high school in place of the necessarily unreliable foundation that the grades now furnish, because they find imposed on them a strictly impossible task.

The high school will also have in the latter half of its course of training, when it can be made comprehensible and practical, a broad course in English grammar, including all but the simpler concrete work. Here again the grades will be freed from a monstrous pedagogical blunder. Grammar became fixed in

[4] Particularly the more complex and abstract portions of physical, economic, and industrial geography, which is now well represented in the grades; technical arithmetic,— stocks and bonds, technical problems, complex and abstract operations; in history the more complicated military movements, the more abstract portions of constitutional history, much of "administration" history, etc. It is questionable whether some of this is not out of place even in the high school,— particularly some topics in history.

the curriculum in an age when grammar was the chief subject. It was grammar of a different type, but this fact was lost sight of in devotion to a name. It was the central study of the early secondary school, as we have seen in earlier chapters, but in the shuffle of the centuries it has been inconsiderately shifted to the elementary school.

An emancipated and rejuvenated elementary school, in a position to do thoroughly and interestedly work fully adapted to it, will be one of the chief contributions of the twentieth century high school to general education.

Method in the twentieth century high school.— Choice of content is essentially a part of method. The other part is organization of content and application of it to the individual. This part of method is to be more fully adapted to the high school pupil's characteristics [5] and to the times. It is still found, in the first epoch of the twentieth century, that high school methods in the average school are abstract, formal, and remote, far from bringing educational material and pupils into vital educational relations.[6]

Advance over the old high school.— In the first place the more pedagogical and psychological methods which were ushering in a new epoch in the study of typical subjects and in the development of power and initiative, in the late nineteenth century,[7] form a strong basis for the growth of method in the new century. These methods, by whatever name known,— concrete, objective, inductive, laboratory, scientific, genetic, developmental,— are to be more perfectly developed, organized, and applied and adjusted to high school pupils and to the purposes of high school education. The laboratory idea is to have a much wider application. Without going into all details of the coming method, which would be impracticable here, we may note some of its principles and supplement what was said in Chapter XX as to its spirit and purpose.

[5] See the author's summary of these characteristics in the Jour. of Ped., 17 (1904–5) : 114 ff. See also Chapter XXII.

[6] It is almost gratuitous to make estimates in such things, but we should perhaps not be far from the truth to say that fifty per cent. of teaching effort has gone under the feet or smoothly over the head of the average high school pupil, because matter and method of instruction have been poorly adapted to him. See page 512, note 14.

[7] See Chapter XX.

The teacher the chief element of method — His qualifications.— The teacher of the twentieth century high school, as ever, will be the chief element of method. This teacher will be distinguished by a knowledge of and sympathy for the adolescent that will be almost intuitive, by a broad mastery of subjects to be taught, by skill in separating adolescent material from the mass, by command of methods adapted to the high school pupil, by power to suggest ideals, to interest, and to inspire. His method is to begin with and center in the human subject, not the culture subject. With such equipment and such aims he will be able to do an infinite work for the physical, as well as for the psychical, boy and girl.

Physical and mental effects of method.— On the physical side it may be said that every failure in determining a proper curriculum, in selecting and organizing material, or in bringing this material into educational contact with pupils brings a mal-adjustment of adolescent forces and a nervous pressure which are unhygienic and threaten distinct injury to the physical adolescent. On the other hand happy selections, guided by an appreciative knowledge of adolescent life, encourage spontaneity and, so far, promote the health of the whole physical mechanism. Stress and strain may be abated, or even abolished, by method. They may, on the other hand, be increased to the breaking point. Again the teacher's mode of procedure in bringing pupil and subject together conditions intellectual growth. If it brings a distaste for the subject it destroys its value for mental growth; but it may quite as easily do the reverse. The teacher of the twentieth century high school is to have a keener sense of method. It will be interesting to note some of the special lines of method-influence he is to follow.

The psychology of method.— The adolescent must possess a subject in his own way,— through personal experience, objectively; through discussing, relating, organizing. The time for observation and objective work in any subject,[8] even in language, has not passed, though the nature of such work

[8] It is interesting to recall here what was said of out-of-door study when discussing the physical side of the program, as it shows how special opportunities for objective work are at hand.

changes, as we approach this period of education. Psychologically, method now, as before, brings into play, and depends upon, the perceptive powers, but a new perceptive power has come, a new world of perception has opened.[9] The adolescent gathers new facts and new kinds of facts. This work is to be supplemented (not preceded), and reinforced by the inspiration of books, as stated in another connection. Such inspiration depends upon, and is conditioned by, the apperceptive basis the pupil can bring to the book. This new observation is accompanied by a more significant induction and inference than has been possible before. The adolescent is relating facts as at no previous age. Loose aggregations no longer satisfy. He is not preoccupied with the sensory relations of younger pupils, nor with such logical relations as appeal to the older student. He is organizing knowledge into the larger wholes that best suit his nature.

From a little different point of view we may say that adolescence is the time for suggestion more than for minute and formal work, which is better suited to other ages. Form gives place to spirit, form-work to interpretation. The new method will therefore feel the influence of this adolescent attitude. Stated in a larger way, method depends upon imagination, upon the sentient processes that are maturing, and upon thought-processes in the large. The pupil is under the leadership more of emotional than of intellectual stimuli. He feels more than he knows, and more than he can express. He is ripe for inspiration, for getting hold of things and letting things get hold of him. The twentieth century method will therefore be of the inspirational sort, to develop great enthusiasms, enforce ideals, encourage constructive work. It will present great facts and relate them in large ways to show their meaning. It will thus enable the pupil to " find himself " in various subjects of the program. Every subject has, somewhere about it, material for great ideals, in the lives of its votaries, in its beneficent contributions to civilization, or in some other outlook which it gives for focusing and directing interest. The emotional and impressionable adolescent, once vitally touched, will grow enthusiastic in the subject, and at the proper time

[9] Lancaster, " Psy. and Ped. of Adol.," in Ped. Sem.

and place will readily take up details that would have endangered success, if attempted earlier. Here again we touch the point discussed in another place. Who can develop, control, and direct the enthusiasms of the adolescent, and can mobilize them, insures the progress of ideals and their fulfilment, and controls the destiny of the state.[10]

Once more, it is well suggested that the period in question is a time for expression, that adolescent work must not consist of mere acquisition. Better, it is time for a new kind of expression, for expression is an absolute requirement, in fact the most important requirement, at all periods. It gives point and meaning to education. Without it there is no education, and there is no real acquisition. It assumes special importance here in view of adolescent characteristics. Expression is not to be confined to formal lessons in language. Each study has its own peculiar expression that gives it point and meaning, and is as much a part of it as the subject matter of the study itself. Expression is double, language expression and application. Each study has its special language expression that affords valuable language training. The expression of application is very varied. Several types will suggest themselves, personal application, application in connection with other subjects and in problems of one's profession, social application. The latter is the most significant. It will be considered in connection with a discussion of school administration in the next chapter.

Old type of examinations to be discarded.— The twentieth century high school will not be an examination-less school. It will not, however, be characterized by traditional examinations.[11] Rather it will be a school of exploration,[11] discovery, development. Correlatively it will be a school that works, not by mass, but by individuals, exploring the individual's power and inspiring him to an endeavor equal to his best. It will ex-

[10] See Burnham, in School Review.

[11] From *examino*, which means first, to swarm, second, to weigh. The idea of examination had its rise in this second and less natural meaning that had to do with mere grossness, bulk. It has curiously recurred, in our use of it, to its primary meaning, because it is so often merely an instrument of mass work.

Explore, from *exploro*, which had the simple meaning that we ordinarily attach to the English word.

plore his power to follow up a subject suited to his years with continuity and with effective results, his power to think and relate within adolescent limits, his power to express and to do, in order to really master fundamental facts, and, as a sum of all, his power to command himself. Examinations, if we are still to use the word, are to be a real educational agency instead of a pump.

A teacher to every 20–25 pupils.— But there is a method-policy or principle that is more basal than anything thus far considered, because it provides for a more intimate educational contact between teacher and pupil. However good may be the other elements of method they are conditioned by the size of classes. High schools have grown in patronage beyond the capacity of school buildings and beyond the compass of the teaching force. The twentieth century high school will show, as one of its distinguishing characteristics, an improved ratio between the number of teachers and the number of pupils.

Effect on method.— In place of the present impracticable condition under which a teacher may have from thirty to forty pupils, or even more, which means long-range, and hence light, training, the new organization of the high school must provide for classes of from twenty to twenty-five pupils.[12] Such an increase in facilities will give a new meaning and scope to method, and will increase the development of adolescent power many fold.

More individuality in method.— Following the genius of the secondary school along the lines that have been suggested we see that the general trend of method is to be toward greater individuality, first because of the differentiation of curricula and the opportunity to select work to meet individual purposes; second, because the teacher, having smaller classes, can come into closer association with individuals.

The general trend of method.— Subordinate to this we see that the tendency is to be toward a new type of objective work

[12] William E. Chancellor says we need about one teacher to every sixteen pupils. The vital point, however, is the size of the class. The ratio of one to sixteen may or may not result in a proper adjustment of class relations. This is a matter of organization and administration. But a proper ratio between number of pupils and number of teachers is a fundamental condition for securing classes of proper size.

applicable to the adolescent; that work is to be initiatory, taking things in the large; that it is to be inspirational, building ideals and putting them into motion; that it is to be moral and may easily guide the pupil into great habits; that, whether we will or no, it is to be religious and may, without violating any religious code, give the pupil a religious attitude that will lead him to settle his personal religion in his own religious group in a way that will fulfil high aims, to the great advantage of himself and society.

The adolescent's school work will not have the organization and system, the knowledge of fine details, and the deeper insight into the meaning of things that come after wider experience, but it will have organization just the same, an organization specially suited to it.

Central idea in method — Inspiration.— If we should select one word to characterize the method for adolescence, especially early adolescence, it would be the word *inspirational*. The late elementary school gives the drill which fixes forms and provides "tools." The high school must inspire. The adolescent lends himself spontaneously to such influence. The teacher who can meet him with inspirational methods can send him to almost any worthy achievement.

Primitive secondary education contrasted with that of later centuries.— Education of early centuries instinctively met the interests of boys of secondary age by its methods.[13] Later centuries fell away from this spontaneous and natural method to something that grew more and more formal and artificial. It was not a wise system of formal education *added* to these natural means, but something *supplanting* them. The twentieth century will reorganize method along the line of the specific needs of the high school period, regarding the secondary period not as a subordinate, but a dominant one, having the right to prescribe conditions by which it relates itself to other periods and to life.[14]

[13] See Chapter IV.

[14] Some Contrasts.— This advance in method that has been broadly outlined may be partly realized by a brief antithetic outline of the average method of the last century, showing what the pupil needed and what he received.

The individual boy or girl demanded attention; the school gave it

Internal and external freedom.— This organization of curricula and method which have been discussed in the last two chapters, will secure healthful internal freedom in the high school. There is to be also an external freedom, the counterpart of the internal. In the nineteenth century the college took a notable step toward this freedom by establishing more elastic entrance requirements.[14] The plan is to be worked out more consistently and with juster treatment of all elements of the secondary course of training. New tests of fitness will facilitate and enrich the freedom of the high school, and will help us to come nearer to the power-test for determining the progress of pupils.

to the study-subject; that is where it individualized most. A multitude of impulses and activities demanded expression; the school said that expression should come through the logical development of the subject as suggested to some adult brain. Impetuosity was there; the school tamed it by formal and difficult tasks, having almost a minimum of suggestion and inspiration. An instinct for orientation, for relating, for forming great and inspiring wholes, was present; the school stifled it with the memorizing of details and with severe formal study. Emotion was budding, to be nipped by the cold logic of books. Social impulses and altruistic thoughts were starting forward, to be barred from the great life of the world, and turned, through the quest of study-subjects into the egotistic narrowness condensed in the expression, "what is there in it for me?" The restless, hungry, because growing, physical nature called, to be outshouted by the "course of study." Inheritances conspicuous in the adolescent, and demanding nothing short of the wisest care and solicitude, were ignored for the inheritances of the school. The adolescent asked for sympathy; the sympathy was given to the physics or the chemistry, the history or the Latin. In general the glowing adolescent was chilled and contracted by the cool ideas of men as applied to men; sometimes, even more unwisely, he was given riotous latitude. Many of these things were good in their places and in the right proportion, but they lacked that human element that the adolescent craves, if he is to achieve anything but a dwarfed development. The school was really more interested in its curriculum than in humanity. Hence the nervous strain; hence the physical abuse. The school perverted and cramped and sometimes well-nigh ruined. With the change in method that has been described the subjects of study will not suffer; they will be enhanced in value.

XXV

THE HIGH SCHOOL OF THE TWENTIETH CENTURY — ORGANIZATION, EQUIPMENT, ADMINISTRATION

A lost adolescent school.— The last chapter showed that the twentieth century high school is to be one adapted to adolescents. The school of early times,— especially the early Greek school, was a fair approximation to such a school. As shown in earlier chapters the school for adolescents was the initial school. It came long before the elementary school was inaugurated. Its instruction and training were simple and definite and calculated merely to induct the novice into the inner life of the community and make him possessor of the choicest inheritances of the race. It was founded on an intuitive regard for adolescent characteristics. In the course of the centuries this school, or an essential part of it, was lost. The manner of losing is interesting. In early times adolescent training was an initiation, and coincident with, or in close connection with, initiation ceremonies. There were no professions or occupations with technique that required study-preparation. "Life in the bush," [1] or apprenticeship,[1] Greek junior citizenship,[1] or the Roman tirocinium,[1] supplied all the technique that was necessary. But, beginning with the sophist schools, there arose, in increasing numbers, professions and occupations that required more and more insistent study and longer training. At present this condition is more marked than ever. The number of subjects of study increased amazingly. Content of studies increased very notably in amount and quality. Because of these growing demands the secondary school was subjected to tremendous pressure. Its tendency was to formalize its course and increase the amount of formal study. Its eyes were fixed rather upon what was beyond than upon itself, upon

[1] These training periods, it will be remembered, followed the initiation ceremonies.

preparation for a "higher course" rather than upon development of genuine secondary school power. It thus lost sight of typical adolescent aims and processes.

Pressure from above.— The pressure came from two directions. It came most from the university, to which, as we have seen, the secondary school early became attached as a preparatory school. The striking increase in demands upon the higher school for training experts and specialists in all departments of effort, industrial, commercial, scholastic, professional, increased the exactions put upon secondary education as a foundation for university and technical college. Through this relation the secondary school came to be devoted to a course of formal training of a rather intense type, in fact one assimilated to the college type, and this status has not yet been radically changed.

Pressure from vocational education.— On the other hand, since the revision of its relations to the university, giving it greater freedom of development, and more particularly since the demand for "vocational training" became urgent, the secondary school in general and especially the high school rapidly became the universal preparatory school for life, and as such was subject to the most intense pressure a school has ever seen. It became essentially formal and technical, yielding to the idea, to which it was long subjected, that the study of books and formal training in subjects were the preparation to be sought.

A longer preparation for the high school.— As these requirements were increased the high school in turn increased demands upon elementary education. The tendency was thus to lengthen and postpone the period of secondary education till its outer limit was several years later than at the beginning of the nineteenth century. Through influence from above the scope and character of its work became radically different from those of the initial secondary school, with its traditional aims and methods and its stimulus to initiative.[2] From pressure at

[2] The extension and postponement of the period of secondary education and the demand for professional and occupational education do not explain this difference fully. From the early years of university attachment the university supplied both teachers and methods. Even

both ends of the line secondary education gave way in the middle. One section of it was forced out,— that which was of a genuinely adolescent nature. Pupils thus lost a distinctive element of secondary education that is, in fact, the central element, and were projected from the formal instruction of the higher elementary, or grammar school, directly into college aims and method. They lost a content, a method, a point of view, a directing and impelling force for effort and work that only a genuine adolescent school can give. Both nature and science impress this fact. To this is largely due the unsatisfying results of present secondary education, the failure of the high school to hold the attention and foster the interest of a majority of high school pupils for a sustained four-year curriculum.

The adolescent school restored.— The twentieth century must bring back this lost but not outworn element of secondary education. To do this it must consider pupils from the age of twelve upward to the college limit.[3] It will therefore no longer be a four-year high school, but one of larger extent. This will permit us not only to restore that adolescent training now so keenly needed, but, as the high school is a finishing school in so many cases, to include something of more formal and technical training.

The twentieth century high school not a four-year school — A double school.— The twentieth century high school will therefore be a reorganized and a double school. The first section will take pupils at the end of the sixth grade of the elementary school. By that time all that is valuable in the present congested and anachronous elementary curriculum can be well done and with higher results that will make a better basis for higher work, or a better introduction to life.[3] The high school will then give them a preliminary training of the initiatory type, suited and necessary to early adolescent years and

before the establishment of the mediæval university Greece and Rome had established a higher education, with the secondary school as feeder. The secondary school very early lost its distinctive method and was supplied with another,— the one that was handiest, not the one best fitted for it.

[3] This presupposes a genuine revision of the elementary curriculum on educational principles.

calculated to stimulate ambition to carry training to a higher stage. The second section of the school will be devoted more to the technique of studies and vocations, verging toward the collegiate type. Aside from the practical considerations in the case, nature herself seems to have established a line of cleavage at the end of the sixth grade, both in subjects of study and in psychologic characteristics. Again at the age of about eighteen comes a dividing point in the period of adolescence, beyond which the adolescent seems to be ready for a type of work somewhat different from that of preceding years.

The " six-year " high school.— To meet the need of a reorganized high school the six-year high school appeared in outline in book schemes about the close of the last century. It is just beginning to work itself out in actual school plans and forms. In this six-year high school there are two sections each occupying three years. It is a question whether the magic of numbers has not influenced the division. Six and six, and three and three seem artificial. They have not yet been proved. The six is more probable than the three. But these are only details. Whatever the actual form of the new high school may be, one thing is plain,— the adolescent school and its legitimate work are to be restored, for it has a distinct and imperative mission, as a foundation for secondary education. At present there is no foundation, and as a makeshift we are using the elementary school as such, so far removed from it in spirit and work that it makes a false base and renders the structure insecure.

Organization of the new school — Distinctive parts.— In the reorganized school the adolescent school will occupy the first section, whether of three or four years. From its very nature it will have a distinct organization, administration, curriculum-content and method. It will for a time be the hardest school in the whole series to adapt to its special aims. Teachers must be trained, study-content must be worked out, organization and administration must be determined with special reference to these aims and to adolescent characteristics through which the aims are to be reached. So far as we have provided any special training at all we have been chiefly concerned with preparing teachers to teach high school subjects and pupils

in general. We must now train them to teach and administer in special sections of high school work.[4] Teachers must be equipped to give real initiation into typical subjects and purposes, and particularly into great ideals, with the emphasis on the adolescent. The teacher here must forget college work and method that have been impressed upon him, must be content to suppress many details that have generally hampered early high school work, to take the subject in the large, and to put into free action the inspirational side of teaching. In this way the high school beginner will have a real induction into the new world of science and art, literature and history, and all the rest. He will get at just meanings and values, and gain wide views and contacts, as a preliminary to a strong grip at some particular vantage point later. On success here depends success in the advanced school and in life. If a teacher has not the gift, or acquisition, of large, inspirational teaching, the adolescent school is not the place for him.

Methods of the two schools to be differentiated.— The previous chapter has given in some detail a forecast of the method of the coming high school, as it would appear from a study of present tendencies and of the conditions to be met. It is evident that typical adolescent method will come in the first section of the newly organized high school, which may conveniently be named the *Junior High School.* Method in the Senior High School and even beyond will have much of the same spirit, but it will shade from that of the junior school toward more technical work, for it is time to be getting the technique of study and vocation. For this reason it is very doubtful whether the arrangement of the two high schools by threes is a scientific one.

All this means that the two high schools must have distinct plants, or distinct suites, and distinct equipment, including teaching force. They are so distinct in aims and methods that they cannot share opportunities, except in a general way,— in museums, in collections, and, perhaps, in laboratories.

[4] A training school for these teachers will naturally be affiliated with a great high school, i.e., a "university of high schools." For stimulus to broad scholarship and for various advantages that are patent, it should also be affiliated with a university.

But high schools and departments of schools are to be concentrated, not scattered.— So far we have been considering organization and administration from the point of view of school ages and general educational aims. It is quite as interesting to consider them from the point of view of special aims. We found in Chapter XXIII that the coming high school is to have various programs of studies suited to different departments or schools into which high school education is becoming differentiated. Each program will give rise to several curricula adapted to special ends.[5] The tendency in large centers has been to place these differentiated departments or schools in different locations, one in one part of the city, another in another part. Such a policy is untenable. The best fulfilment of twentieth century high school aims requires a central and well-articulated, rather than a scattered administration. A separate organization for industrial and vocational education would defeat its fundamental purpose. The movement in high school education must be centripetal.

The twentieth century high school is therefore to be a community of schools,— a university of schools, having common interests and common tasks, but each school organized for its special end, and at the same time in such a way as to give broad training, develop broad interests, and make broad thinkers.

Dangers of isolation.— In the early days of specialization the tendency was to make one's study and thought too restricted, limiting it to some minute field, and especially separating it from necessary correlations. The result was a narrow specialization that was likely to prove weak through its own littleness and inexactness.[6] A similar separation and isolation would hinder or thwart the main aim of high school education, viz., to make a true citizen of the world, a cementing and unifying force, not a mere member of a group with disintegrating tendencies. Civic conservation and progress depend in large degree upon mutual respect between different groups of con-

[5] See Chapter XXIII.

[6] Specialization is a fundamental necessity in all departments of human effort. It inevitably brings a kind of separation. To fulfil its purpose it requires a unifying and broadening spirit,— requires, as an absolute characteristic, ability and disposition to think in fundamental social, civic, industrial, and political units.

tributors to community wealth, tangible and intangible, and upon the understanding and appreciation of one another's interests.

Community ideals dependent upon centralization of high school education.— The secondary school is the basal school for starting these social ideas. The very psychology of the secondary school pupil shows that this is the vantage time of life for developing those habits of thought that make for industrial peace and for true democracy in all directions. The high school with its new vocational work offers the finest sort of opportunity for carrying out this principle and carrying it far enough to settle these ideas for life. Concentration of all departments of high school work in a single plant furnishes the exact conditions needed for training to think in those fundamental units upon which successful democracy rests. It makes the right conditions also for creating a community of industrial interests. It gives a better understanding of the other fellow and his work, and at the same time it brings greater zest into high school life and larger educational values.

A co-educational school.— The spirit of the reasoning we have been following will make the twentieth century high school a coeducational rather than a divided institution. Contact of the feminine mind and the masculine mind is broadening for both. A girl's points of view and intuitions are different from the boy's. Appreciation comes through opportunities to understand one another broadly. How could this be possible if high school education were to be divided? Considered from either the social or the intellectual point of view then coeducation argues itself. The argument from social economy and school finances is patent.[7]

[7] The social argument is stated rather aptly in the following quotation:—

"The young woman who knows young men only in dress suits will get a very false opinion of them. Woman in her hour of ease is a very inferior creature to woman at work, and it is inevitable that a man who knows her only in the former guise will get an unfavorable opinion of the sex. When man gets to looking on woman as an amusement his moral ruin is impending, because he can find plenty of women who are very amusing, but not otherwise fitted for his companionship. Men and women will always attract each other, but it is only by meeting in their every day work as helpmates and rivals, as comrades and com-

Some limitations.— But, as was shown in the Appendix to Chapter XX, the physiological and mental development of the two sexes differs, if not in kind, yet in time. Girls mature materially earlier than boys. Hence the same kind and degree of scholarship-results cannot be expected of both at the same age. As already suggested, therefore, there will naturally be some separation, in order to bring out the best educational results for both. But at the same time the school organization will provide abundant opportunity, both in class-room and otherwise, for the two sexes to associate and to study and understand one another under most approved conditions.

Principles of concentration.— A brief outline of the 20th century high school toward which our chapters have been leading will illustrate, and at the same time extend and strengthen, the argument. The school must meet three conditions: — 1. The Senior High School must be distinct from the Junior High School. 2. Each department of the senior school must have equipment and facilities for doing its special work in an enterprising and masterful manner, and at the same time must have access to means for a general, to support the special, education. 3. There must be opportunity for exchange of ideas between departments and for rather intimate association of pupils of one department with those of another. The outline will be as follows for a large municipality. For smaller communities and for scattered communities details will differ to suit special conditions, but the fundamental idea will be the same.

General plan.— 1. A site that will afford an environment in keeping with the highest secondary school ideals.

2. A general school building, with ample assembly facilities, a suite of class-rooms, and general equipment in the form of library, collections, and other means of interest and instruction. This will serve at once as a special school for those following a general curriculum or a literary curriculum, as a reference hall, and particularly as a meeting place for various groups of pupils, and even for the whole pupil body, for common lec-

panions, that they will respect each other. All artificial substitutes for such normal mingling, whether devised for scholastic, religious, or financial purposes, have resulted in diseased conditions of the imagination." From an editorial in the New York Independent.

tures and exercises and for the daily initial program that will be both instructive and inspirational. This central school may be named the school of literature, art, and music (though this detail is not an essential part of the plan).

3. **Various schools grouped around this center.**— Closely connected with this central hall by protected passages or other ready means of access will be various schools, each fully equipped with appliances for doing its peculiar work, and an assembly room of its own to be used for special purposes. In this way the following additional schools will be provided:

(a) A Science School.
(b) A Mechanic Arts School.
(c) A Commercial School.
(d) A Horticultural and Agricultural School.
(e) A Technical School.
(f) A Supplementary Vocational School.

Reasons for a high school of horticulture and agriculture.— Only the fourth one in the list will perhaps suggest a query. A little consideration, however, will show that it has a distinct place even in the city. 1. High school opportunities should include all standard activities; otherwise some departments of endeavor will be shut off that may be the very ones in which certain pupils would come nearest to fulfilling the measure of their ability. To choose the best each pupil should have access to all. Horticulture and agriculture demand as careful education and as much science, and bring into play as high a degree of mentality, as any vocation or profession. They offer as many charms as the best. They give returns equal to the best. To shut off access to this great field of effort therefore is to leave potential units of efficiency undeveloped; for the school in question would give pupils an opportunity to waken dormant interests in nature and nature's occupations and, in many cases, to develop a skill in rural vocations that would give a broader success and satisfaction than would be possible in any other field of endeavor. The opportunity for broadening thought and culture is evident and gives added value to the plan. 2. There must be interchange between city and rural life. The old stream cannot go on flowing from country to city and preserve the integrity of population. There must be two parallel

streams flowing in opposite directions. Many residents of cities would succeed better in the country. The school we are discussing would re-form habits, and it would start new habits in city children that would take them to country opportunities and country wealth, material and otherwise. To cut off avenues of effort in a city and in city schools is a sure bid for proletariat conditions and a proletariat spirit. 3. Much city space is now wasted, considered either from the point of view of beauty or from that of other utility. A utilization of vacant lots and home enclosures, which would be a part of the systematic program of the school in question, would add indefinite thousands to means of support and greatly add to a city's wealth and beauty. 4. The "City Beautiful" would also be a direct object of such a school, stimulating interest in beautifying public and private grounds and giving definite instruction in the practical working out of these ideas. Public parks might well be in charge of the school and thus managed with a new economy. Actual participation in the management and care of such things enhances their value and significance in the minds of the people. Too much done for any class of people, with no thought or care or exertion on their part, cheapens the thing done even in their estimation, and does not encourage a public, or civic, spirit.

Social and financial advantages of a university of high schools.— We are to have then, as already suggested, a university of high schools. Here in close association the student body, though separated naturally into special groups, is as naturally united in common interests and aims. It is supplied with the best conditions for following special programs toward individual aims and general programs toward the central aim of intelligent, well-directed citizenship. Each group learns to be appreciative of every form of endeavor and generous in according other groups opportunities for expression and development. Each one becomes better equipped and better disposed to work for common interests, because it can approximate others' conception of the fundamental ideas on which healthy civic development rests. Because of this mutual sympathy, appreciation, and respect any community will have a surer, more rapid, and more economic development. There will still be

healthful variety in unity, but the fantastic and wasteful divergence of the present will be reduced. Such an organization as is suggested will result in large financial economy in school expenditure and at the same time give the best conditions for economy of time, effort, and method in education. Community ideas and community virtues are more thoroughly and more quickly developed through a community of work.

Special features of the Junior High School.— In the Junior High School departments may not be so thoroughly differentiated and organized into schools, for obvious reasons. This is not the period for specializing. It is rather the time, as has so often been emphasized, for initiation into great ideas and subjects, preparatory to more technical work. And yet, as so many will, for the present, end their school life here, there may be some elementary specialization. Such specialization, however, must be infused with the spirit of adolescent education founded upon the principles that issue from adolescent psychology; it must be adapted to the adolescent's point of view.

The Township High School an illustration of successful centralization.— That the centralized high school is practicable for other than very large communities is evident from the success of the Township High School of Illinois that has been described with some detail in a previous chapter.[8] Its distinguishing characteristics are a central plant accommodating various departments or schools, curricula appealing to all interests, and dormitories for each sex to meet the needs of pupils whose homes are too remote to make daily trips feasible. These facilities furnish a stimulus and outlet for all the secondary activities of a large district. So broad are the opportunities offered that the school performs some of the functions of a college, in addition to those of a high school. It is evident that the conditions for such broadening are favorable, whether we take the point of view of economy, or that of organization. The popularity of this type of high school is prophetic of the larger growth of the more fundamental idea of centralization.

Extension work.— In the twentieth century high school there are to be social relations outside of the pupil body, for the school is going to enlarge its clientele by extending its ad-

[8] See Appendix of Chapter XXIII.

vantages and inspiration to the general public, and particularly to that part of it that is still young and has missed high school work. In other words it is to add "public" curricula to its other specialized curricula, to provide continuous and sustained work of different grades for the non-school public. In this way it will unite community and school in closer bonds of appreciation. It will enlist both students and teachers in a cooperative "community work," since such a scheme will furnish various opportunities, within their power and time, to render service, though the main work will be done by a special staff.

Universal high school education.— This twentieth century high school, adapting itself wisely to all secondary school interests, and organizing itself in close harmony with social, industrial, and culture conditions and opportunities, with its differentiated curricula and its "extension" work, is to provide facilities for the attendance of all children of secondary age and all others who desire secondary school privileges. More than this, it is to make its facilities seem so worth while that it will not only attract attendance, but almost compel it. Its mission is to make attendance universal. As there are in the United States more than eleven million persons whose ages lie between fifteen and nineteen (inclusive), while in all the secondary schools of the country, public and private, there are only about four million pupils, it is evident that the high school has a tremendous task before it.[9]

A whole-year and long-day school.— The high school will carry on its work not for certain restricted months and hours. It will be universal in another way. It will be a whole-year and long-day school, with the necessary relays in instruction, quarter year credits in place of half year credits, evening classes and day classes. It is thus to come up to its full economic

[9] We shall of course meet the objection of those who unfortunately believe that secondary education should not be given to all. But even if we make large allowance here, the task of the high school will be sufficiently great. The aim, however, should be, "universal high school education for the capable," and the capable are all the normal. See Chapter XXII, page 356.

On this matter of numbers and proportions and aims William E. Chancellor has a telling and suggestive paragraph of which use has here been made. For fuller figures see page 357, note 9.

possibilities. This very fact will make it possible to extend the ministries of high school education without a corresponding increase of plants and current expenses.[10]

But we must consider more than the outside of the high school, the shell. Unfortunately at the present time more attention is being given to this than to some other things that are quite as necessary. The equipment of the plant is the vital point in high school economy. The twentieth century equipment is to show a marked advance over that of the nineteenth century.

Equipment,— material.— The typical high school of the late nineteenth century had the regulation laboratories for physics and chemistry, sometimes a makeshift laboratory for biology, a general library of a formal character and of very modest proportions, a stock of text-books, and the typical school seat. To this was sometimes added a lunch-room of a quasi commercial nature. The coming high school is to have a laboratory for each department,— not merely for the sciences, but for history, literature, music, art, vocational work, and all the rest. Each is to be fully equipped with appliances and collections appropriate to the department, for studying things as they are rather than through text-books. This will relieve the abstractions of the older school. With each laboratory is to go, as a coordinate element, a broad, well-selected collection of books, written from the stand-point of the adolescent and what he can and ought to get out of high school work. This will relieve the forcing and general anachronism of high school method. To facilitate this more vital work and to supply more hygienic conditions the seating of the school is to undergo striking reforms. Tables and chairs suitable for real work, instead of mere book-plodding, will take the place of the familiar stationary desk and seat. Finally the lunch room is to

[10] Details for working out such a plan would occupy a volume. But it should be noted here that in carrying out the vocational function of the high school abundant opportunity will be given for combining two kinds of work, study-work and the work of some occupations that may reasonably claim the attention of high school pupils. This will provide for general culture and for vocational training at the same time; in fact the former is part of the latter. It will provide a wholesome combination of interests and give steadying power to a large class of persons not now adequately reached by high school facilities.

be a correlated rather than an isolated factor in high school life. It is to have intimate relations, as to principle and organization, with the physical and vocational departments. These are the fundamentals of the material equipment of the school. Aside from these each department or school will distinguish itself by details suited to the particular school or community and giving a fine outlet for initiative on the part of school authorities. One can at once picture many details appropriate for individual schools of this university of high schools.

Equipment — Teachers — Their qualifications.— With this material equipment is to come its complement, higher teaching power. As already indicated, there will be many more teachers proportionally than now, a gain that will by itself secure better adolescent scholarship and larger educational values generally, both in training and in administration. The advance in teaching qualifications, however, is to be more significant than increase in the number of teachers. The nineteenth century gave most attention to the knowledge side of the teacher's equipment. It followed at best a supposititious method in its high school teaching. The twentieth century is to have far broader training for secondary school teaching, and is to make this training an absolute requirement for every secondary school teacher. The school in which this training will be conducted is to organize a genuine adolescent method for the rediscovered adolescent school, in the direction of the method principles noted in the previous chapter. It will be the center of diffusion for this more vital method. There will be developed a secondary school teacher who has not only a wider and richer knowledge of his subjects [11] than has been common before, but a lively sympathy with the new method based upon a sympathetic knowledge of the psychology of adolescence. Such a teacher will be able to determine and utilize high school centers of attention, to organize and unify all effort for more definite and more characteristic results, and to transfuse pupils with the counterpart of his own enthusiasm.

Sexes more evenly represented in the teaching force.— In this distinctive teaching force the sexes are to be more evenly

[11] Not merely knowledge, but power to select, adapt, and apply with a view to true adolescent aims.

represented. Adolescence has specific gains to be derived from each sex and must suffer if cut off from due opportunity to secure these gains. This would be true even if our schools were not organized on the principle of coeducation. With such an organization it is more emphatically true.

Supervision.— But we need to utilize the best in a corps of teachers and to unify and correlate all teaching effort. We must secure greater economy and effectiveness in the use of educational material. We must be able to mobilize all effective values in the high school. This is especially necessary for success in the crucial epoch of development before the individual is thrust upon the responsibility of the scholastic or the world-university. Provision must therefore be made for organizing the material and human factors in the high school and uniting them in the most productive educational work. Hence the element of supervision must be enlarged, without, however, destroying the initiative of the individual teacher. A keen observer remarks: — "The high school needs one assistant principal with purely supervisory duties for every fifteen or eighteen teachers. It cannot be run profitably with no oversight of teachers by superiors solely devoted to that purpose." We supply a great deal of purely supervisory assistance in the elementary school. In the equally critical secondary period, the last vantage period for determining educational and personal interests and for forming the guiding habits of life, we should have equally careful supervision. All the facts of secondary school life support such conclusions. The advance in organization that has been suggested may easily double the efficiency of the high school. The looser administration of the past is a characteristic derived from the college through the influences described in earlier chapters.

Administration.— Administration in the twentieth century high school is to be determined by special high school characteristics that have already been dwelt upon. In the increase of administrative units in the personnel of the school the principal will become more distinctly an organizer, unifier, and inspirer. To make him more fully master of his opportunities he is to be supplied with a business manager who will have charge of the purely business details of the schools or departments in the

administrative plan. In the larger systems a business manager will be required for each school of the university of high schools.

Relation of teaching and administration.— But teaching itself involves administration. The old notion that a teacher has two distinct functions, the function of teaching and the function of disciplining, whatever that may have meant, is a false one. A good teacher and a poor disciplinarian or the reverse is an impossible combination. Teaching power most intimately involves power to organize and administer all class-room forces for lively and effective educational results. It is as one of the fundamentals of teaching-method that class-room management attains significance. A genuine adolescent curriculum and curriculum-content, with their effective ideals, teachers with adolescent aims and method carried out in the new spirit, and an educational environment supplied by the school site and the material equipment of the school to which reference has been made affect and forward administration in many ways. Every fine adjustment here goes far toward directing activities in normal, healthful channels. The government side of administration is largely settled here.

Directing principles.— But there is need of some informing principle that shall give scope, direction and force to management and administration. If we follow out the aim of which we have caught fore-views at different points in the last chapters it will not be difficult to determine what the general plan is to be. We shall apply it here more particularly to high school government, but it plays an important part in school administration as a whole. We have seen that one of the distinguishing features of the twentieth century high school is to be the direction from which aims are discovered and applied,— that the general am is to be from within. This will be the more evident and significant because an essential part of the high school is to be restored,[12] so that there will be more freedom to study the real needs and relations of the high school from a view-point within the school itself. In the general policy of the school there is to be less passivity, more activity, less ordering from without, more ordering from within. The main idea

[12] A genuine adolescent curriculum and method. See Chapter XXIII.

in organization, whether for administration or for method, is to be genuine participation, not the formal participation that has so often satisfied. The principle will appear first and centrally in connection with curriculum, study-content, and method that make a very impressive part of high school environment through which pupils are inspired with ideals of government. These factors produce many of the best opportunities for genuine participation. Minds well occupied with productive activities under the stimulus of cooperation best learn the great principles of control.

Participation in government.— But participation must extend beyond class-room work. The pupil is to participate, and feel the necessity and value of his contributions, in these directions. But it is quite as essential that he should cultivate the same spirit by cooperating in the government and general activities of the school, though, as already shown, government is largely settled by a sound organization of curriculum and method of instruction.[18] This double participation supplies the mainspring of social ethics. If this were some artificial scheme to be fitted over or into high school life, its value might be doubted. So far from being artificial, it is suggested by nature herself and is founded on very obvious principles. In the first place an idea becomes strong only through the principle of use, through doing. Doing is never sound and efficacious till the moving force is from within. The direction must be from within outward. The plan of real participation in the policies and activities of the school establishes this direction and tends to make the organization and government of the school issue in self-direction, as all government, to have any point, must issue. Growing motives supplied by all parts of school life foster the idea.

Cooperation emphasized by the psychology of adolescence. — Again, the general plan is suggested and enforced by principles of adolescent psychology. The high school pupil has certain well marked characteristics which commend cooperation in government. He likes to do things, likes the concrete, likes ideals rather than rules, related facts rather than isolated ones. He is ready to participate, to organize associa-

[18] This includes as a basal element the personality of the teacher.

tions for association's sake, and also for achieving results that give prestige and importance to the group. He has learned, or his instinct instructs him, to subordinate himself to the group. All this is due to his social feelings. Later he grasps the idea intellectually from the point of view of value to the individual and to the community. Action then becomes deliberative rather than instinctive. In the adolescent school he is just learning to socialize himself.

Adolescence is also the period for relating things. Why confine this interest to relating cause and effect in geology and chemistry, form and expression in language, individual and group in zoology, and other similar relations? It would have even more legitimate exercise in relating the various acts that make up conduct to principles, motives to standards, modes of self expression to ideals, ideals to environment, forms and facts of government to the informing spirit beneath them and to their appropriate ends, and in relating self through all these avenues to the school-group and the town-group,— all this under the inspiration of participation in a great enterprise. Practice, i. e., expression, gives meaning to every idea and relation, and gives skill and efficiency in executing ideas. There is every reason why the adolescent should share the responsibility of government that gives practical expression to all the ideas that have been mentioned. He will never really appreciate government till he does. He is fond of ideals, which are impelling forces. He needs to do something with his ideals. Let him do it in the most productive enterprise the world knows, government that issues in self-government.[14]

Reasons for preferring a cooperative plan to a scheme of self-government.— The adolescent needs scope, but at the same time needs wide and sympathetic guidance. Cooperation in school government therefore seems more reasonable than a scheme of pure self-government, and it is along this line that the most helpful work has been done in giving the secondary

[14] The idea is not a new one. It goes back to the great school of Trotzendorf in the Middle Ages; beyond him to Vittorino's wonderful school in the early Renaissance; beyond him, in a way, to the source of modern secondary school pedagogy, Quintilian. It is merely a revival through the inspiration of modern pedagogy, which has for its basis the best of historical pedagogy.

school pupil opportunities to express himself in the government of the school. To place pupil-government wholly in the hands of the pupils themselves would take away one of the main functions of the school,— that of suggestion, of guidance, of efficient influence that come from a combination of the two forces, pupil and teacher. Sharing responsibility and initiative takes school government out of the realm of theory.

The late nineteenth century began to see some attempts to carry out the principle of self-government. The School City, the Citizen-Tribune plan, and other similar organizations came into notice and had some success. But they were top-heavy with details of organization too complicated for general adoption. Simpler schemes have prevailed. Many schools have been successfully carrying out the principle of student-cooperation in one form or another. The principle will be carried out with more exact appreciation of adolescent nature, and hence with better adaptation to that nature. It is to become a regular policy, rather than an intermittent one.

Relations of cooperation to high school social life.— There are in the high school special groupings and associations that have been non-scholastic, extra-school associations. But under twentieth century high school conditions, with the broader interpretation of program and curriculum and the extended daily time limits of school life, they will be more closely correlated with the general work of the school. They will be a definite agency in promoting school spirit and school activities. These associations are the school societies of all sorts growing out of the new development of the social instinct. Definitely attached to the school program in its wider interpretation, under sympathetic guidance and training that give a higher freedom, they will accomplish two far-reaching purposes. First, they will give one of the most desirable, because natural, opportunities for cultivating self direction and cooperation in forwarding the great interests of the school. Such organizations that rise from the natural flowering of the social instinct will give a zest to school spirit, and, rightly encouraged and developed, will advance important school movements far beyond bounds that could be reached by less natural agencies. Here perhaps lies the safest and soundest solution of the high

school social problem left by the nineteenth century. The first result accomplished carries the second with it. The adolescent may be occupied, even absorbed, in achievement in place of the vapid interests offered by high school "society" life when no pains were taken to give his cravings higher exercise, or when the pains taken took a non-adolescent direction. The society idea must be one of the presuppositions of the twentieth century high school. It readily adapts itself to cooperative plans for government, and, while keeping strictly within the natural, healthful interests of high school pupils, may be brought to a higher fruitage in making the social side of the twentieth century high school worthy of the school and its opportunities.

Cooperation in school government as a means of developing interest in community ideals.— Power as it slowly develops in the adolescent's life should overflow into community life. This gives meaning to it all, and so appeals to the adolescent. It gives relations, and so again appeals. It is suggestive and it leads to great wholes, and still again appeals. An acquisition, as already suggested, is never complete till it has expression. Expression is never complete till it unites the individual to the world. Failure to give such application in school life brings limitation and loss. It affects the whole personality. The physical rebounds to great ideals equally with the psychical. Adolescent personality owes quite as much to the first as to the second.

So then esthetic ideals attained in study will be worked out in school grounds [15] and home grounds, school walls and home walls, school order and home order, school means of esthetic culture and home means of esthetic culture; and to the school and home applications will be added applications in wider circles. Literary ideals will find expression in the ownership of fine books, fine inside and outside. Civic ideals will be applied not only in school government, but in civic relations to the community. Principles of science will be applied to bettering school equipment and school hygiene, and will find similar expression in the home and the town. Appreciation of the advantages of high school education will develop interest

[15] The school environment thus may be made a distinct means of developing ideals.

and stimulate participation in high school extension work. All these ideas remain in large degree unknown till they are seen in their practical relations. They are not realized in their full meaning till they have the larger application in social life. The teacher's function does not end with teaching his subject. He must be a constant stimulus to this higher education.

Federation.— So far we have considered the high school individually. But high schools have long been united more or less loosely in associations, and have been influenced by common standards. There are two conditions for securing enterprise and progress, whether for a person or for an institution,— 1, individual freedom to develop initiative; 2, cooperation that secures the best for all. But this cooperation must be of a type that stimulates without hampering and without confining the individual to the pace that a closely centralized system might impose on the whole organization. As already noted, in the early history of the high school customs and sentiments, methods and matter were imposed from above and by associations dominated by university sentiment. At the close of the nineteenth century, however, a certain freedom for individual development and adaptation had been attained. There had also grown up a kind of group spirit, an indigenous tendency to develop common norms and standards and to influence as many high schools as possible to adopt them. It remains for the twentieth century to develop a larger power of association that will give higher and broader standards and a more stimulating unity, but at the same time conserve individual freedom. This is a delicate enterprise. It may be carried out by federating local associations through a central association made up of delegates from the local bodies. The present committee on the reorganization of secondary education is a step in this direction. Such a federation would develop and recommend norms, methods, and general guiding principles, and would encourage high schools in all sections to work out types of high school education adapted to particular needs. In this way the high school would maintain and utilize the best ideals, become in a way a clearing house for both individual and group thinking, and would make high school ideals not only progressive but effective.

Conclusion.— Under the favorable conditions thus supplied for individual initiative, and with the inspiration and knowledge that come from association, the twentieth century high school is to study its obligations and opportunities more intimately and intelligently and enter upon the larger mission that such a study will suggest. Its work is not to be play, on the one hand, nor an unwelcome drudgery on the other. It is not to be a luxury, a social privilege, but a democratic necessity. It will not be characterized as abstract, formal, perfunctory, remote and out of touch with present needs, impractical. It will be developmental in method, cooperative in government, responsive in attitude, cosmopolitan in study-opportunities, universal. It will be a real initiation into the choicest treasures of the race,— its acquisitions, its satisfactions, its ambitions, its opportunities, its ideals. It will help its pupils to understand themselves and the vocation to which they are hastening; it will develop public spirited appreciation of others and a generous spirit of cooperation. The adolescent school will have been restored. It will assume leadership in developing community standards and ideals. The twentieth century high school with its immense possibilities is to stand out as an embodiment of the most inspiring educational ideal of the ages. It will hold the most important place not only in perfecting the worker for his work, but, what is quite as important, in equipping him for the more profitable employment of his leisure.

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